

## **Understanding the Demand Side of the Low-Wage Labor Market**

### **Final Report**

**Submitted to:** Alan Yaffe  
Alana Landey (c/o Alan Yaffe)  
U.S. Department of Health and Human Services  
Administration for Children and Families  
Office of Planning, Research, and Evaluation  
370 L'Enfant Promenade, S.W.  
Suite 706  
Washington, DC 20447

**Submitted by:** Gregory Acs and Pamela Loprest  
The Urban Institute  
2100 M Street, NW  
Washington, DC 20037

**Date Submitted:** April 10, 2008

## **Acknowledgments**

This research was supported under contract number 233-02-0092, Task Order No. HHSP23300012T, between the Urban Institute and the U.S. Department of Health and Human Services, as well as a grant from the Ford Foundation. This report builds on earlier surveys of employers in the low-wage labor market conducted by Harry Holzer, and we have benefited greatly from his advice and comments. In addition, the survey of employers in the low-wage labor market was conducted by Mathematica Policy Research; in particular we thank Todd Ensor and Frank Potter for their help in developing the survey questionnaire and sampling strategy and for conducting the survey itself. We also benefitted from the advice of Rob Santos on methods to improve the survey response rate. Justin Resnick provided able research assistance, and we received thoughtful comments from Harry Holzer and Sheila Zedlewski as well as our HHS project officers, Alan Yaffe and Alana Landey.

## **Disclaimer**

The views and opinions expressed in this report are those of the authors and do not necessarily reflect those of the Urban Institute, the U.S. Department of Health and Human Services, The Ford Foundation, or Mathematica Policy Research. All errors are the responsibility of the authors.

## Table of Contents

<b>Executive Summary .....</b>	<b>iv</b>
<b>I. Introduction.....</b>	<b>1</b>
<b>II. Characteristics of Employers and Workers.....</b>	<b>12</b>
<b>III. Hiring for Less-skilled Jobs .....</b>	<b>22</b>
<b>IV. Job Requirements .....</b>	<b>34</b>
<b>V. Wages and Benefits of Less-skilled Workers .....</b>	<b>44</b>
<b>VI. Job Performance and Advancement .....</b>	<b>66</b>
<b>VII. Important Factors in Attaining Better Jobs.....</b>	<b>77</b>
<b>VIII. Conclusions and Implications .....</b>	<b>94</b>
<b>References .....</b>	<b>104</b>
<b>Appendix A. Survey Methods.....</b>	<b>106</b>
<b>Appendix B: Survey Instrument (Separate Cover)</b>	
<b>Appendix C: Supporting Materials (Separate Cover)</b>	

## List of Exhibits

Exhibit E.1	Summary of Major Findings .....	xi
Exhibit II.1	Characteristics of Firms Filling Noncollege Jobs .....	13
Exhibit II.2	Characteristics of Firms Filling Noncollege Jobs (Industry and Occupation) .....	16
Exhibit II.3	Demographic and Human Capital Characteristics by Employer Type.....	18
Exhibit III.1	Method Employer Used to Identify Employee for Recently Filled Noncollege Job by Employer Type .....	23
Exhibit III.2	Difficulty Finding Workers for Noncollege Jobs .....	25
Exhibit III.3	Difficulty Finding Workers for Noncollege Jobs by Employer Characteristics .....	27
Exhibit III.4	Important Factors in Employer Hiring for Recently Filled Noncollege Jobs.....	28
Exhibit III.5	Testing and Checks on Recently Hired Workers for Noncollege Jobs .....	30
Exhibit III.6	Employer Willingness to Hire Disadvantaged Workers for Noncollege Jobs.....	32
Exhibit IV.1	Importance of Education, Experience, and Specific Tasks for Recently Filled Noncollege Job by Employer Type.....	35
Exhibit IV.2	Importance of Job Requirements by Skills of Recently Hired Employee.....	37
Exhibit IV.3	Frequency of Specific Tasks for Recently Filled Noncollege Job .....	40
Exhibit IV.4	Noncollege Jobs with Minimal Requirements by Various Definitions .....	42
Exhibit V.1	Hourly Wages of Employees in Recently Filled Noncollege Jobs by Employer Type.....	45
Exhibit V.2	Mean Wage by Characteristics of Firms Filling Noncollege Jobs .....	47
Exhibit V.3	Mean Wage by Demographic and Human Capital Characteristics .....	48
Exhibit V.4:	Mean Wage by Importance of Education, Experience, and Specific Tasks for Recently Filled Noncollege Jobs .....	50
Exhibit V.5	Employer-Provided Benefits of Recently Filled Noncollege Jobs by Employer Type.....	52
Exhibit V.6	Employer Assistance with Public Benefits.....	56
Exhibit V.7	Work Schedules of Employees Recently Hired into Noncollege Jobs by Employer Type.....	58
Exhibit V.8	Work Schedules of Workers Recently Hired into Noncollege Jobs by Mean Wage and Percent with Health Insurance Offer .....	59
Exhibit V.9	Training Provided to Worker Recently Hired into Noncollege Job by Employer Type.....	61
Exhibit V.10	Training Provided to Worker Recently Hired into Noncollege Job by Mean Wage and Percent with Health Insurance Offer .....	64

### **List of Exhibits (Continued)**

Exhibit VI.1	Problems on the Job by Employer Type.....	67
Exhibit VI.2	Chance of and Time to Promotions by Employer Type .....	69
Exhibit VI.3	Raises and Promotions by Job Tenure .....	71
Exhibit VI.4	Characteristics of Recently Filled Noncollege Jobs by Requirements .....	73
Exhibit VI.5	Job Characteristics of Recently Filled Noncollege Jobs by Requirements .....	75
Exhibit VII.1	Regression of Wage Rates on Job Requirements, Worker Characteristics, and Firm Characteristics.....	80
Exhibit VII.2	Regression of Wage Rates on Job Requirements, Worker Characteristics, and Firm Characteristics.....	86

# The Demand Side of the Low-Wage Labor Market

## Executive Summary

Over the past decade, state and federal welfare policies have increasingly emphasized moving welfare recipients into jobs, and over this time period large numbers of recipients have gone to work. As welfare recipients enter the labor market they join other groups of disadvantaged and less-skilled workers seeking jobs, including ex-offenders, high-school drop-outs, less-educated young black men, and single mothers who are not receiving welfare. These workers all face similar challenges in the labor market: finding jobs that offer benefits and relatively high wages, retaining jobs once found, and finding opportunities for advancement.

Most past research in this area has focused on the workers themselves—the supply side of the labor market—and what individual characteristics are associated with better jobs and advancement. This is only half the equation. Understanding the hiring practices, job requirements, and workplace policies of employers—the demand side—can provide considerable information to policy makers interested in promoting work and advancement among welfare recipients and other less-skilled workers.

To this end, in 2007 we fielded a nationally representative survey of private-sector employers to provide information about employers' practices and workplace policies relevant for less-skilled workers. We gathered information on employer characteristics, job requirements, wages and benefits, hiring practices, and potential for advancement.

The survey focuses on employers' most recently filled jobs that require no more education than a high school degree or GED; we refer to these jobs as noncollege jobs. This group of jobs includes both entry-level jobs—those requiring minimal skills and experience—as well as “next-level” jobs—noncollege jobs demanding higher skill and experience and potentially offering higher wages and benefits. The rest of this Executive Summary outlines our major findings and gives a brief discussion of the implications for policy. Exhibit E1 at the end of the Executive Summary is a chart of our major findings.

### • WHAT TYPES OF EMPLOYERS HAVE NONCOLLEGE JOBS?

**About half of all recently filled noncollege jobs are with large employers (over 100 employees), nearly five out of six are in nonrural areas, and over one third are in industries like retail trade and service industries where average wages are lower.** Compared with all jobs in the economy, noncollege jobs are disproportionately likely to be found in small employers and slightly more likely to be found in lower-wage industries. About one-fifth of noncollege jobs are with employers in the nonprofit sector and about a quarter have some level of unionization. About three-quarters of these jobs are located within a mile of public transportation.

- **HOW DO EMPLOYERS FILL NONCOLLEGE JOBS?**

Although many noncollege jobs are filled through low-cost methods of referrals or walk-ins, **advertising is still the most common way these jobs are filled** (about half of them), and a third of this advertising is on the internet. Entry-level jobs (those with minimal requirements) are less likely to be filled by advertising and more likely to use walk-ins or referrals than other noncollege jobs.

**Only about one-tenth of noncollege jobs are filled using workforce intermediaries such as public or private agencies.** However, the employers responsible for almost 20 percent of noncollege jobs report being contacted in the past year by a public or private agency trying to place welfare recipients. Employers report the quality of the candidates sent from these agencies is similar to the other candidates for these jobs. The percentage of jobs filled by intermediaries (including welfare and nonwelfare candidates) is far less than the percentage of employers reporting contacts, suggesting these contacts are often unsuccessful.

**Finding workers for noncollege jobs is not universally easy for employers.** For only one-fifth of these jobs do employers report it is easy to find workers while for another fifth employers report it is very difficult. More than one-quarter of these jobs are with employers who report they recently hired someone without the required qualifications to fill a noncollege job because they really needed an employee. Large firms, firms in higher-wage paying industries and rural firms are more likely to report having trouble finding workers.

- **WHAT ARE EMPLOYERS LOOKING FOR IN NONCOLLEGE HIRES?**

As found in past research, so-called **“soft skills” are important factors in hiring for noncollege jobs.** The most important factors in hiring for more than three-quarters of these jobs are having a positive attitude, desire to work hard, and performing well in the job interview. Some other factors that might be termed “hard skills” are also important for many of these hires, but to a lesser extent. These include work experience and English fluency. Skill training and school performance are much less important factors. In addition, **a factor that is very important in almost half of these hires was the willingness of candidates to work odd or flexible hours.**

**Employers with noncollege jobs almost universally report they are willing to hire current or former welfare recipients; far fewer are willing to hire an ex-offender.** Only three percent of women recently hired into noncollege jobs are identified as current or former welfare recipients; employers did not know the worker’s welfare status for 41 percent of workers. About one-fifth of all noncollege jobs are with employers who say they would be willing to hire an ex-offender regardless of the specific crime. Another 35 percent of jobs are with employers who would be willing to hire ex-offenders depending on the crime. In addition, **for almost half of these jobs employers conduct criminal background checks and for about 40 percent they conduct drug tests.**

- **WHAT SKILLS DO NONCOLLEGE JOBS REQUIRE?**

**Many jobs that do not require a college education do require prior experience and/or skills training.** Having a high school degree or GED is extremely important or required for over half of all recently filled noncollege jobs. Having prior job-related experience is extremely important for about two out of five of these jobs, and having specific skills training or certification is extremely important for over a quarter of them. For almost one-fifth of these jobs, all three requirements are required or extremely important. A majority of noncollege jobs require cognitive tasks be performed daily, including reading and writing. Almost three-fifths of these jobs require daily use of computers. These facts suggest that while some may characterize noncollege jobs as “less-skilled,” many employers do require specific skills and experience.

**Only a minority of noncollege jobs may be accessible to job seekers with minimal prior experience and training.** Only about a third of noncollege jobs do not require or rate as extremely important a high school education, prior related experience, or specific training. We refer to these as entry-level jobs. This does not mean entry-level workers cannot be hired into any of the other two-thirds of jobs. Employers do report hiring workers into jobs for which they do not have the required education or skills training. However, accessing these higher-requirement jobs may be more difficult for workers that do not meet the requirements.

- **WHAT DO NONCOLLEGE JOBS PAY AND WHICH ONES PAY MORE?**

**The median wage paid to recently hired workers in noncollege jobs is \$11.** Twenty-five percent of these workers earn \$8.50 or less an hour. The highest paid quarter of these workers earns \$14.50 or more an hour. In addition, about half of the workers in these jobs usually earn overtime, tips, bonuses or commissions, although we do not know how much these add to the hourly wage.

**Jobs for which past job-specific experience or specific skills training are extremely important or required pay substantially better than other jobs,** even after taking into account worker characteristics, specific job tasks, and employer characteristics. The specific daily work tasks that are associated with higher wages are writing, using a computer, and monitoring instruments.

**Employer characteristics associated with higher wages include larger firm size, nonrural location, for-profit status, and high union concentration. Wages in noncollege jobs vary by industry, with jobs in construction tending to pay higher than average wages and those in retail trade paying lower than average wages,** even after controlling for specific job requirements. Working full-time is also associated with higher wages. How an employer identified the most recently hired worker and whether the employer offers formal training are not significantly correlated with wages. Finally, worker characteristics associated with higher wages include having a college degree, being white and being male, even after controlling for job requirements and employer characteristics.



- **WHAT BENEFITS DO NONCOLLEGE JOBS PROVIDE?**

**Many noncollege jobs are in firms that provide benefits such as health insurance, pensions and paid leave, but not all the workers in these jobs are eligible for these benefits.** For example, although 88 percent of these jobs are in firms that offer health benefits to some employees, only 69 percent of workers in these jobs actually qualify for health benefits. Most of the rest could become eligible as their tenure on the job increases or if their work hours increase. A similar pattern of coverage exists for pensions and paid leave. In general, benefits are more commonly offered in large firms, higher-wage industries, and nonrural locations.

**Not all workers with paid leave can use this benefit to care for a sick child or family member, although almost all workers can take unpaid leave for this reason.** Although 71 percent of workers in noncollege jobs have paid leave for themselves, only 53 percent can take paid leave to care for a sick child or family member. However, 97 percent of noncollege workers can take unpaid time off to provide this care.

**Most noncollege jobs have regular day or evening shift work, but 15 percent require night shift or rotating shift work.** On average, night shift and rotating shift work jobs pay less and have fewer benefits. The vast majority of workers in noncollege jobs work full-time and earn significantly higher wages than part-time workers.

Almost all noncollege jobs provide some form of informal or general workplace training, and **a substantial proportion of noncollege jobs offer specific training.** Over half provide formal training from an instructor with a set curriculum on-site, and another 20 percent provide formal off-site training. Almost one-tenth provide other specific skill training. In addition, over half of noncollege jobs provide a mentor or “job buddy.” Surprisingly, formal training is much more common in lower-wage industries than in higher-wage industries.

- **HOW DO WORKERS PERFORM IN NONCOLLEGE JOBS?**

**The incidence of problems with employee performance for recently hired workers is low.** Only 15 percent have had any of the following problems on the job: tardiness; poor attitude toward work; lack of basic math, verbal, reading skills or other job-related skills; substance abuse issues; or difficulties interacting with coworkers, supervisors, or customers and clients. The most prevalent problem employers report is tardiness, occurring for nine percent of these workers. These results must be viewed in the context that most of these workers have fairly short tenures: three-fifths have been on the job for less than six months.

**The majority of noncollege jobs offer an excellent or good chance of promotion, according to employers.** Almost 70 percent of recently filled noncollege jobs offer a good to excellent chance at being promoted for workers that perform well on

the job and 46 percent of these promotions would typically come within a year. Another 19 percent of jobs rarely or never offer promotions. Promotion possibilities are higher in large firms. Over a quarter of jobs in smaller firms rarely or never offer promotions.

Not only do employers report high promotion possibilities, **many workers on the job for at least six months have been promoted or have received raises.** Among workers who have been with the employer for at least six months, 64 percent have received raises. Among these longer tenure workers, over 30 percent are in jobs from which employers say they rarely or never promote. This means that among workers on the job for at least six months, a large proportion of those in jobs with promotion possibilities have been promoted. The raises received by these workers are nontrivial. Of all who received a raise, the median wage increase was \$1 over the median starting wage of \$9.50.

- **HOW DO ENTRY-LEVEL JOBS DIFFER FROM OTHER NONCOLLEGE JOBS?**

**Entry-level jobs accessible to workers with minimal experience and training offer significantly lower wages and fewer benefits than next-level jobs that require more experience and skill.** Entry-level jobs (about a third of all noncollege jobs) pay on average \$9.25 an hour. Only 45 percent of workers in these jobs have health insurance coverage, 42 percent pension coverage, and 55 percent paid leave. Workers in these jobs are far more likely to be working a rotating shift or part-time hours. These jobs are more often found in small firms and in rural areas.

- **WHAT ARE THE MOST IMPORTANT FACTORS FOR GAINING BETTER JOBS?**

“Better jobs” can be defined in a number of different ways. We consider several alternative definitions based on compensation packages, job requirements, and promotion opportunities.

Generally, **the factors associated with higher wages are also those associated with having a high-wage/benefit job.** We define high-wage/benefit jobs as those paying more than \$10 an hour and offering health insurance and paid leave (44 percent of noncollege jobs). Jobs for which a high school degree and previous experience are extremely important are more likely to be high-wage/benefit jobs than jobs with lesser requirements. Similarly, those that require daily writing and computer use are also more likely to be high-wage/benefit jobs than those that do not. Older workers, men, full-time workers, and those with at least a high school education who have recently obtained a noncollege job are all more likely than their counterparts to hold high-wage/benefit jobs. However, while noncollege jobs in construction tend to pay higher wages than other industries, these jobs are not more likely to offer health benefits and paid leave.

Jobs with greater skill requirements offer higher wages and are also sought-after placements. These **higher-skilled jobs are more likely to be in large firms and more likely to be filled through employment agencies and advertisements as opposed to unsolicited applications and walk-ins.** Higher-skilled jobs are those for which a high

school degree, job-related past experience, or specific skills training is extremely important; these jobs account for 68 percent of noncollege jobs. Jobs that require daily reading, writing, and computer use as well as full-time jobs tend to be higher-skill jobs, and individuals who are younger and lack high school degrees are less likely to be in higher-skill jobs than their counterparts. Even after taking job, employer, and other personal characteristics into account, blacks are less likely than whites to be in higher-skill jobs.

Among entry-level jobs, those with good promotion possibilities are better jobs. **About one-third of entry-level jobs offer excellent promotion opportunities. Entry-level jobs in nonprofits are less likely to offer good promotion opportunities, but entry-level jobs with employers who offer training have better advancement opportunities.** Other employer characteristics, including the hiring method used, are not significantly related to entry-level jobs with better promotion possibilities. By and large, worker characteristics are not associated with promotion opportunities with the exception of age: younger workers in entry-level jobs are more likely to be in jobs that employers say have an excellent chance at promotion.

### **What Policies Can Help Improve Outcomes In The Noncollege Labor Market?**

The findings from this national survey of employers in the noncollege labor market provide useful guidance to policy makers seeking to help less-skilled workers obtain and keep jobs and to help employers find the productive workers they need. First, it is clear that employers are looking for literate workers who can fill positions in which they are frequently called upon to write and to use a computer, and these positions carry a wage premium. These specific skills can be emphasized in high school and GED curricula as well as in employment and training programs targeted at vulnerable populations such as high school dropouts, welfare recipients, and ex-offenders.

Workforce intermediaries can play a role in helping to place workers into jobs but different segments of the noncollege labor market have different needs and requirements. For entry-level jobs with the lowest skill requirements, the most important path to hiring is a personal referral—the worker is recommended to the employer by a friend, relative, professional acquaintance, or another worker. Referrals as a means of identifying workers are also more common among small and rural employers. This corroborates past evidence that building networks for entry-level workers is important. This can be accomplished by intermediaries substituting for personal networks and providing referrals to employers as well as by providing networking opportunities for workers with limited skills either with small business owners or other workers have had success in this segment of the labor market.

For “next-level” noncollege jobs that typically have higher skill requirements, we find that the most common method of filling these positions is through the use of advertisements. As such, the basic job search help provided by many employment and training programs such as access to postings and job clubs may be the most cost-effective way to help relatively higher-skilled job seekers in the noncollege market find work.

Access to internet postings is also important since for almost a third of jobs filled through advertising the advertisement was posted on the internet.

We also find that there is differential pay across industries for similar noncollege jobs, suggesting that public and private sector employment service providers that target particular employment sectors (like construction) may help less-skilled workers secure relatively higher-paying jobs. Also, across all types of jobs, industries, and workers, noncollege jobs in firms that have high unionization rates pay significantly more than similar jobs in non-unionized firms, suggesting that helping less-skilled workers access union jobs may be important.

Finally, we find that noncollege jobs that have been recently filled by women and blacks pay less than those filled by whites and men even when taking into account job requirements, employer characteristics, and the workers' own skills, education, and experience. This finding strongly suggests that labor market discrimination is still an important issue for less-skilled female and minority workers.

### Exhibit E1: Summary of Major Findings

Research Questions	Major Findings
How are noncollege jobs filled?	<p>Advertising is the most common method used to fill noncollege jobs overall.</p> <p>Noncollege jobs with minimal requirements (entry-level jobs) are more often filled through referrals than other noncollege jobs.</p> <p>Relatively few noncollege jobs are filled using intermediaries.</p> <p>Finding workers is “easy” for only a minority of noncollege employers overall, but easier for those hiring for jobs that require fewer skills.</p>
What are employers looking for in noncollege hires?	<p>“Soft” skills (e.g. interpersonal skills, attitude) are important factors in hiring.</p> <p>Willingness among noncollege employers to hire former welfare recipients is high. Far fewer employers are willing to hire ex-offenders.</p> <p>Almost half of employers conduct criminal background checks and drug tests.</p>
What skills do noncollege jobs require?	<p>Many noncollege jobs are not “unskilled” but require prior job-related experience or skills training.</p> <p>The majority of noncollege jobs require daily performance of cognitive tasks (e.g. reading, writing); almost three-fifths require daily use of computers.</p> <p>Only a third of noncollege jobs are entry-level and thus readily accessible to job seekers with minimal prior experience and training.</p>

(Table Continues)

### Exhibit E1: Summary of Major Findings (Continued)

Research Questions	Major Findings
What do noncollege jobs pay and which ones pay more?	<p>Median wage for these jobs is \$11 an hour.</p> <p>Jobs that require more skill and experience pay substantially better than other noncollege jobs.</p> <p>Large employers and those with high union concentration pay higher wages; employers in rural areas and nonprofits pay lower wages, even after controlling for job requirements and worker characteristics.</p> <p>Jobs in the construction industry pay higher wages and jobs in retail services pay lower wages, even after controlling for job requirements and other employer and worker characteristics.</p>
What benefits do noncollege jobs provide?	<p>About two-thirds of recently filled noncollege jobs offer health insurance and offer pension plans to workers.</p> <p>An additional fifth of these jobs are in firms that provide these benefits to some workers, but the recently hired worker is ineligible due to short tenure or too few hours.</p> <p>More than two-thirds of recently filled noncollege jobs offer paid leave, although only half allow use of this paid leave to care for a sick child or family member.</p> <p>Over half of noncollege jobs offer specific training, although this training is not associated with increased wages after controlling for other job, employer, and worker characteristics.</p>

(Table Continues)

**Exhibit E1: Summary of Major Findings (Continued)**

Research Questions	Major Findings
How do workers perform in noncollege jobs?	<p>Relatively few employment problems are reported for recently hired workers; the most common is tardiness reported for nine percent of workers.</p> <p>The majority of noncollege jobs are reported by employers to offer an “excellent” or “good” chance of promotion.</p> <p>Many workers on the job for at least six months have been promoted or received raises. The median raise received is \$1 per hour on a median starting wage of \$9.50.</p>
How do entry-level jobs differ from other noncollege jobs?	<p>Entry-level jobs (those with minimal requirements on education, experience, and training) offer lower wages and benefits.</p>
What are the most important factors for landing better jobs?	<p>The factors associated with higher wages are also associated with finding a job that has a relatively high wages and benefits.</p> <p>Those hired through use of employment agencies or advertising (as opposed to walk-ins) are more likely to be in higher-skill jobs.</p> <p>Entry-level jobs with higher promotion possibilities include those in for-profits (versus nonprofits) and those with employers that offer formal training. Hiring method is not significantly related to promotion possibilities for entry-level jobs.</p>

## **Understanding the Demand Side of the Low-Wage Labor Market**

### **I. Introduction**

Over the past decade, state and federal welfare policies have increasingly emphasized moving welfare recipients into the work force. Policies limiting the length of time families can remain on welfare, requiring work in exchange for benefits, and sanctioning families for non-compliance all promoted work. These welfare reforms, combined with the strong economy of the 1990s, led to a dramatic decline in the welfare rolls and a dramatic increase in the employment rates of welfare recipients. However, over the past decade, research has shown that the jobs welfare recipients and former recipients move into provide relatively low wages and benefits (Acs and Loprest 2001, 2004 and Loprest and Zedlewski 2006).

As welfare recipients enter the labor market, they join other groups of disadvantaged workers seeking work, including ex-offenders, high-school drop-outs, less-educated young black men, and single mothers who are not receiving welfare. These workers all face similar challenges in the labor market: finding jobs that offer benefits and relatively high wages, retaining jobs once found, and finding opportunities for advancement. Increasingly, policy makers and researchers are addressing some of these issues for less-skilled workers (e.g. Rangarajan and Novak (1999), Andersson, Holzer, and Lane (2005), and ACF's on-going Employment Retention and Advancement project (Bloom et al. 2005)).

Most past research in this area has focused on the workers themselves—the supply side of the labor market. This is only half the equation. Understanding the hiring practices, job requirements, and workplace policies of employers—the demand side of



the labor market—can provide considerable information to policy makers interested in promoting work and advancement among welfare recipients and other less-skilled workers.

To this end, we have fielded a national survey of employers to gather information about employers’ practices and workplace policies relevant for less-skilled workers. Specifically, we obtained information about how employers identified workers for noncollege jobs, the skill demands of these jobs, how they train and compensate the workers that fill these jobs, and the extent to which recent hires into these jobs advance with the firm. In addition, we collected data on the characteristics of the employers as well as of the most recently hired worker.

The survey focuses on the segment of the labor market that is most relevant for current and former welfare recipients and other disadvantaged groups that generally have low levels of skills and experience. We label this segment “noncollege,” defined as jobs that require no more education than a high school degree or GED. We focus on this group of jobs because it includes both entry-level jobs with minimal skill and experience requirements and “next-level” jobs into which workers may advance without gaining a college degree. We discuss the range of jobs within the noncollege labor market throughout the report.

Questions about the demand side of the labor market that we address in this report include:

- What are employers’ hiring practices for noncollege jobs, including methods they use to search for workers, evaluation criteria for applicants, and screening tests for new hires? How common is the use of intermediaries in hiring less-skilled workers? How difficult is it for employers to fill their noncollege jobs?

- What are employers' attitudes toward hiring certain groups of workers including TANF recipients and ex-offenders?
- What are the requirements of noncollege jobs in terms of education, training, and experience? What is the availability of jobs for the "entry-level" worker with the lowest skills and prior experience?
- What is the range of compensation, benefits, work schedule, training, and other characteristics among noncollege jobs?
- What are the problems employers report having with workers in noncollege jobs? What are the opportunities for advancement among these jobs?
- How do employer policies and practices vary by firm characteristics including size, industry sector, and geographic location (rural/nonrural)?
- What employer practices and job characteristics are associated with higher wages among all noncollege jobs?
- How do measures of employee success (including wage levels, benefits, and advancement) correlate with specific employer policies and practices?

In the rest of this section, we briefly review what is known about the low-wage labor market, discussing the supply side (the workers) and the demand side (employers) to provide context for our findings. We then describe our survey of employers in the noncollege labor market.

### **Research on Low-Wage Labor Markets**

The findings of past research on low-wage or low-skilled workers provide important context for the questions we examine in this study. Past work outlines the characteristics of these workers and identifies the important factors for earning higher wages and advancing in the labor market. Studies have also examined ways to assist low-skilled workers find better jobs, including the role of continuing education and training, use of intermediaries, and specific industry-focused solutions. Past research

focusing on employers is more limited, but several studies provide information on the job requirements and characteristics of employers who hire low-skilled workers and point out the factors that are associated with better jobs and advancement. We review these varied literatures briefly, focusing on the content most relevant for our current study.

First it is important to note that although there are many studies of low-wage or low-skilled workers, there is no standard definition for this group of workers. One strategy is to study workers whose hourly wage rate falls short of a specific threshold, which itself can be variously defined, for example in relation to the federal minimum wage, the median wage in the economy, or the poverty line. Another strategy is to focus on low-skilled workers, defined using an educational attainment threshold such as high school degree. Even using varied definitions, most studies have similar findings on the general characteristics of the low-wage or low-skill workforce.<sup>1</sup>

In general, low-wage workers are less educated, younger, in poorer health, more likely female and nonwhite, and less likely to be married than the average worker. For example, of workers who earn less than 150 percent of the federal minimum wage, only 46 percent have more than a high school degree and 19 percent do not have a high school degree. This is compared to 60 percent and 10 percent of all workers, respectively (Acs and Nichols 2007).

Past research indicates that some low-wage workers are able to advance to higher-wage and better-quality jobs. Many low-wage workers experience significant wage growth in percentage terms as they gain experience (Gladden and Taber 2000, Schochet and Rangarajan 2004). However, low starting wages means that even relatively high

---

<sup>1</sup> Several recent studies include Acs and Nichols (2007), Schochet and Rangarajan (2004), Acs, Ross, and McKenzie (2001).

wage growth leaves many of these workers earning low wages (Schochet and Rangarajan 2004). Andersson, Holzer, and Lane (2005) find that a majority of workers with consistently low earnings over a three-year period have consistently higher earnings in the subsequent six years. However, only a small percentage of initial low-earners consistently earns over \$15,000 a year in the subsequent period. The research suggests that only a subset of low-wage workers actually escape the low-wage labor market permanently.

Some research examines the factors that determine who finds or moves into better jobs and earnings. Labor supply research clearly demonstrates that higher levels of education and experience are rewarded with higher wages in the labor market generally. Among low-wage workers, there is also evidence that higher levels of education and experience are associated with higher wages and wage growth (Schochet and Rangarajan 2004). A great deal of policy focus has been given to ways to improve the skills and education of adults in the low-wage labor market as a means to improved jobs with some success (Osterman 2007; Holzer and Martinson 2005).

However, another strand of research and policy has focused on the role of employer characteristics in achieving better jobs for low-wage and low-skill workers. The argument is that targeted matching of workers to certain employers or jobs can lead workers (especially those with disadvantages such as poor work histories or criminal background) to better jobs.

Research shows that certain employer and job characteristics are associated with higher wages and better wage growth and advancement. For example, Andersson, Holzer, and Lane (2005) find that working in a larger firm, in a firm with low turnover,

and in a higher-wage industry are all positively associated with higher wages and higher likelihood of advancing to higher earnings. They also find that employers that provide low earners with opportunities to advance are more likely to do so for other workers. That is, there are certain employers that generally provide superior employment opportunities beyond what can be explained by industry or size.

Sectoral policy strategies echo the idea that certain industries provide better opportunities for low-skill workers. These strategies seek to match workers with high-growth industries that offer better jobs and possibilities for advancement (Holzer and Martinson 2005). These and other employment strategies often rely on the use of intermediaries to assist low-wage workers in finding higher quality jobs. Intermediaries have the potential to bridge informational gaps between workers and employers and provide deeper knowledge of the labor market to better connect workers to good jobs (Giloith 2004).

Although the characteristics of low-wage employers and jobs are viewed as important in the literature and policy discussions, to date, research on employers who hire low-skilled workers is quite limited. Although there are many small-scale, qualitative studies of employers, there are few large-scale survey efforts. One of the most comprehensive studies was by Holzer (1996) who surveyed private employers hiring for jobs that did not require a college degree in four metropolitan areas (Atlanta, Boston, Detroit, Los Angeles) to understand the prospects for low-skilled workers with particular attention to differences across race and gender and urban and suburban locations.

The study finds that while many of these noncollege jobs pay low wages and benefits, wages are significantly higher in jobs with certain skill requirements,

specifically those that require daily use of reading and writing and computers, and those that require a high school degree, specific experience, and prior training. Wages are also higher in larger firms and those that use certain methods of hiring such as a private employment services. In addition, employers are less willing to hire workers with unstable work histories, especially those with criminal records. The study concludes that the prospects for jobs in the noncollege market are limited for less-educated and less-skilled workers with little experience, particularly among minority and female workers. In part this is due to lack of skills required for better paying jobs and in part this is due to continued discrimination.

In a study conducted in the late 1990s, Holzer and Stoll (2001) surveyed employers in four metropolitan areas (Los Angeles, Chicago, Cleveland, Milwaukee) to better understand the effects of welfare reform in the workplace. This study finds that employers are willing to hire welfare recipients and about one-third of surveyed employers had done so in the prior two years. A key factor in determining whether an employer hires welfare recipients is whether or not the job site is accessible (i.e. is it near where recipients live or close to public transportation). Other important factors include recipients' education and race, with high school dropouts and minority recipients much less likely to be hired. Employers report concern with both the soft skills (showing up on time, manners) and hard skills (literacy, numeracy) of the welfare recipients they hire. The cognitive skills required for the jobs welfare recipients fill—even those that do not require experience or higher education—are not trivial. In general, employers report that welfare recipients perform as well as or better than other workers in the same job.

A more recent survey of employers in the San Francisco area that have hired workers to fill low-skilled jobs also finds considerable variation in requirements for jobs in the low-skill labor market (Maxwell 2006).<sup>2</sup> Many “less-skilled” jobs require specific skills such as English, math, problem solving, and communication. In addition, these jobs require more physical strength and mechanical skills than higher-skill jobs, on average. Not surprisingly, skills in shorter supply are associated with higher wages, and skill requirements vary across industry and occupation. The study also supports the finding that unionized firms, certain industry sectors, and larger firms pay higher wages, controlling for skill requirements. Given these differences in requirements, even in slack labor markets, employers report trouble finding workers with the right skills to fill low-skilled jobs.

Maxwell also finds that employers’ recruiting and screening methods are related to the skill requirements of the job. More extensive recruiting is done when specific skills are required for even these low-skilled positions. In addition, the study finds extensive opportunities for advancement in the low-skill labor market. Over 80 percent of the entry-level jobs studied offer promotion opportunities without increasing education levels.

Our study of employers in the less-skilled labor market adds to this literature in several ways. Unlike any of the other studies, we gather and analyze data from a nationally representative survey of employers who hire less-skilled workers. As such, our national survey of employers allows for comparisons of employer and job characteristics and practices across firm size, industry, and rural/nonrural areas. In addition, our survey gathers information relevant to understanding issues of finding better jobs and employee

---

<sup>2</sup> This survey defined low-skilled jobs as jobs with limited entry requirements, specifically those that required workers to have no more than a high school education and no more than one year of work experience.

retention and advancement in the low-wage labor market and allows us to draw connections between employer practices and employee outcomes, for the nation and for industry sectors with the most jobs in the low-wage labor market.

### **Background information on survey**

The Survey of Employers in the Low-Skill Labor Market was funded by the Administration for Children and Families of the U.S. Department of Health and Human Services (ACF) and the Ford Foundation and collects information from employers in the noncollege labor market. Our goal for the survey was to obtain a sample that, when appropriately weighted, reflects the labor market opportunities for less-skilled workers in the economy and that allows for comparisons across key subgroups based on employer size and location.

To insure that employers surveyed represented a viable source of jobs for less-skilled workers, we completed surveys only with those employers who had hired a worker into a job that did not require a college degree or less within the past two years. Note that we focused on the skill requirements of the job and not the skill level of the worker for this screening.

For our sample, we drew a stratified random sample of businesses that had at least four employees. Businesses with three or fewer workers, by definition, hire few workers and do so infrequently; thus, they are an unlikely source of employment for job seekers. Overall, our sample represents 3.6 million establishments with four or more workers in the U.S.; this is approximately half of all business establishments and 87 percent of all



workers in the economy.<sup>3</sup> Not all these businesses will have filled a noncollege position in the past two years, however. After screening, we find that our sample represents about 2.1 million businesses with four or more workers that have filled a noncollege job.

The sample was drawn from the Dunn and Bradstreet database and stratified based on employer size (two strata—four to 99 workers and 100 or more workers), urbanicity (two strata—rural and nonrural), and industry (target industries that have a higher concentration of low-wage jobs and all other industries).<sup>4</sup> This stratification ensures large enough subgroups for analysis across these dimensions.

Data were collected in the spring and summer of 2007 through computer-assisted telephone interviews; respondents who requested a paper version of the survey to complete at their convenience were provided that option. Overall, our sample consists of 1,060 employers; our response rate is 54 percent.<sup>5</sup> Although this is less than our target response rate of 70 percent, we find that respondents and nonrespondents are broadly similar across employer size categories (less than 100 v. more than 100 employees) and industry groups (lower-wage industries v. higher-wage industries) and only slightly skewed toward rural employers compared with nonrural employers. The analytic weights used in this report adjust for survey nonresponse. Technical details about survey procedures appear in Appendix A and in the technical companion report, *National Survey of Business Establishments* (Ensor et al. 2008).

---

<sup>3</sup> Based on authors' tabulations of the 2005 Current Population Survey and 2003 County Business Patterns data.

<sup>4</sup> Target industries include retail trade, hotel services, health services, and personal services.

<sup>5</sup> This is response rate type 3 as defined by the American Association for Public Opinion Research (2006) and is the ratio of the number of eligible employers who completed the survey (1,060) divided by the estimated number of employers who were eligible to respond to the survey (1,958 assuming the same distribution of survey eligibility among nonrespondents).

The data are weighted so that they represent the job opportunities available to less-skilled workers at businesses that have filled a noncollege position in the past two years.<sup>6</sup> For ease of exposition, we describe our data interchangeably in terms of recently hired less-skilled workers and recently filled noncollege jobs.

In the following sections of the report, we present our findings. Section Two presents information on the characteristics of employers and recently hired less-skilled workers. In the third section, we discuss the hiring practices of employers, including their search methods, use of intermediaries, job screens, and attitudes to hiring certain groups of workers. In the fourth section, we discuss the requirements of less-skilled jobs and the common tasks these jobs require, including how many noncollege jobs are entry-level, in the sense of having minimal job requirements. In Section Five, we examine the wages, benefits, work schedules and training offered to recently hired less-skilled workers and discuss how wages vary across firm and job characteristics. In Section Six, we consider employees' job performance and the promotion possibilities associated with noncollege jobs. In the seventh section, we present results on the employer and job characteristics associated with better jobs, defined as those with higher wages, providing certain benefits, requiring higher skill and experience levels, and providing excellent promotion possibilities. Our final section includes a discussion of our findings and their implications for policy.

---

<sup>6</sup> The sample weights to represent the job opportunities for workers in the low-wage labor market were developed in a two-stage process. First, weights were constructed based on the probability that a given employer was sampled taking into consideration sampling strata and adjusted for nonresponse. The employer weight was then transformed into a worker or job weight by multiplying it by the size of the firm.

## II. Characteristics of Employers and Workers

This section provides information on the characteristics of employers that have hired workers for noncollege jobs in the past two years and the characteristics of those workers. For ease of exposition, we describe our results interchangeably in terms of recently hired less-skilled workers and recently filled noncollege jobs, even though our education-level screen is for the job requirements and not the worker.<sup>7</sup>

All of the results in this section and throughout the report are weighted to represent the distribution of noncollege *jobs* available at these businesses rather than the distribution of *businesses*. For example, we report that more than half of all recently filled less-skilled jobs are in firms with 100 or more employees instead of reporting that five percent of all firms that filled less-skilled jobs in the last two years have over 100 employees, although both statements are true.

### Employer Characteristics

Exhibit II.1 highlights the results from our survey on the characteristics of employers in the less-skilled labor market. The distribution of recently hired less-skilled workers across employer size and industry groups parallels the distribution of all low-wage workers across these dimensions described earlier. Just over half of all recently hired less-skilled workers work for employers that have 100 or more employees; almost one-third are with employers that have 500 or more workers. Another 13.2 percent of

---

<sup>7</sup> For example, a worker with a college education could be hired to fill a job that does not require more than a high school degree. This worker is not “less-skilled” per se.

**Exhibit II.1**  
**Characteristics of Firms Filling Noncollege Jobs**

<b>Characteristic</b>	<b>Percent</b>
<b>Size</b> (n=1060)	
4-19	13.2
20-99	33.4
100-499	20.6
500+	32.7
<b>Multi-site employer</b> (n=1056)	65.0
<b>Growing location?</b> (n=1035)	
Growing	34.3
Shrinking	8.4
Stable	57.3
<b>Higher-Wage or Lower-Wage Industry</b> (n=1060)	
Higher-Wage	63.5
Lower-Wage	36.5
<b>Location</b> (n=1060)	
Nonrural area	85.5
Rural area	14.5
<b>Distance from public transportation</b> (n=1009)	
Less than a quarter mile	59.1
Quarter of a mile to a mile	15.2
More than a mile	13.9
No public transportation	11.8
<b>Minority Owned</b> (n=1029)	12.1
<b>Woman Owned</b> (n=1038)	11.0
<b>Minority or Woman Owned</b> (n=1019)	19.1
<b>Non-profit</b> (n=1052)	19.7
<b>Union shop</b> (n=1002)	
Zero Percent	76.0
0-80 Percent	14.8
80-100 Percent	9.2
<b>Worker composition of Low-skill Jobs</b>	
Percentage African-American (n=990)	15.3
Percentage Hispanic (n=985)	14.0
Percentage Woman (n=996)	51.3

Source: Authors' tabulations of the Survey of Employers in the Low-Skill Labor Market.

recently hired less-skilled workers are employed in very small firms (four to 19 workers), and 33.4 percent work in firms with 20 to 99 employees.<sup>8</sup>

The majority of recently hired less-skilled workers are employed in establishments that are stable in size (57.3 percent) or growing (34.3 percent). A small minority of recently hired less-skilled workers work for employers that are downsizing in that location (8.4 percent).

Over one-third of recently hired less-skilled workers are employed in industries that have a higher concentration of low-wage workers than other industries. These “lower-wage” industries are known to hire more less-skilled workers, especially those with a history of welfare receipt (Loprest and Zedlewski 2006).<sup>9</sup> They include health services, retail trade, hotels, and personal services.

The geographic distribution of less-skilled jobs across rural and nonrural areas roughly parallels the distribution of all jobs across geographic locations.<sup>10</sup> Of less-skilled workers, 85.5 percent are employed by firms located in nonrural areas; 14.5 percent work for employers in rural areas.

By and large, these jobs are accessible via public transportation. Almost three-quarters of recently hired less-skilled workers’ employers are located within one mile of public transportation; nearly 60 percent are located within a quarter mile of a transit stop. Only about one in ten have no public transportation. Note, however, that even if the jobs are accessible by public transportation, not all less-skilled job seekers live near such

---

<sup>8</sup> Compared to the distribution of all workers in the economy, noncollege jobs tend to be in smaller firms. Thirty-seven percent of all workers are in firms with less than 100 workers (authors’ tabulations from the 2005 CPS) compared with about 47 percent of recently filled noncollege jobs.

<sup>9</sup> Throughout the report we will provide results for two groupings of industries, those with a high concentration of low-wage jobs (referred to as “lower-wage” industries) and those with a lower concentration of low-wage jobs (referred to as “higher-wage” industries). For the specific definition of these groupings see Appendix A.

<sup>10</sup> For a description of our rural/nonrural designation, see Appendix A.

transportation. Further, an employer may be near a transit stop, but if the bus or train runs infrequently or irregularly, proximity to transit may overstate accessibility.

About one in five recently hired less-skilled workers are employed by minority-owned or women-owned businesses, and about one in five work for nonprofits. Three quarters of recently hired less-skilled workers work for employers that have no union workers while almost 10 percent work for businesses in which 80 to 100 percent of the workers are union members. The balance of recently hired less-skilled workers are employed by businesses with union membership ranging from 1 to 79 percent.

Exhibit II.2 provides a more detailed look at the industries and occupations of workers recently hired into noncollege jobs. The largest numbers of recently filled noncollege jobs are in the service industry, 12.4 percent of workers are employed in health services and another 26.5 percent in other service industries. Nearly 20 percent work in retail trade. A sizeable portion (17.2 percent) work in manufacturing suggesting that this industry remains an important source of jobs for those without college degrees. The types of work conducted in noncollege jobs are concentrated in four main occupational categories. About one-third of these jobs are in office and administrative support occupations. Another one-fifth each is in the service and the production, transportation, and material moving occupation categories, respectively. Ten percent of these jobs are in sales occupations. Within the service occupation category, the greatest numbers of noncollege jobs are in cleaning and maintenance, followed by food preparation and health support occupations.

**Exhibit II.2**  
**Characteristics of Firms Filling Noncollege Jobs (Industry and Occupation)**

<b>Characteristic</b>	<b>Percent</b>
<b>Industry (n=1060)</b>	
Agriculture, Forestry, Fishing, Mineral	0.7
Construction	7.7
Manufacturing	17.2
Transportation, Communications, Utilities	5.4
Wholesale Trade	4.3
Retail Trade	19.7
Financial/Insurance/Real estate (FIRE)	5.2
Health Services	12.4
Other Services	26.5
Unidentified / DK	0.8
<b>Occupation (n=1060)</b>	
Manager, Professional, and Related	5.0
Service	22.9
<i>Healthcare Support</i>	5.0
<i>Protective Service</i>	1.6
<i>Food Preparation Service</i>	6.1
<i>Cleaning and Maintenance</i>	9.1
<i>Personal Care Service</i>	1.1
Sales and Related	10.2
Office and Administrative	32.2
Farming, Forestry, and Fishing	0.2
Construction and Extraction	4.8
Installation, Maintenance, and Repair	3.2
Production, Transportation, and Material Moving	18.8
Refuse / DK	2.6

Source: Authors' tabulations of the Survey of Employers in the Low-Skill Labor Market.

## **Characteristics of recently hired less-skilled workers**

Employers also reported on the characteristics of recently hired less-skilled workers.<sup>11</sup> Although we are ultimately interested in demand-side factors, because any filled job is a match between a specific worker's characteristics or skills and the requirements of the job, we need to take worker characteristics into account. For the most part, our findings on less-skilled workers' characteristics are similar to what was reported earlier from surveys of low-wage or low-skilled workers.

Recently hired less-skilled workers are roughly equally divided along gender lines with 51.9 percent female and 48.1 percent male (Exhibit II.3). Over two-thirds of these workers are white non-Hispanic, and 13.6 and 14.6 percent are Black non-Hispanic and Hispanic, respectively. Only 6.0 percent are reported to be immigrants by their employers. Although many of the workers holding these less-skilled jobs are young—about one-quarter are less than 25—a substantial number are older and may have been in the labor market for some time. Three out of five recently hired less-skilled workers are in their prime earning years—ages 25 to 44—and 16.1 percent are older workers, ages 45 or above.

There are several notable differences in the demographic characteristics of recently hired less-skilled workers across employer size, industry, and location. These may reflect demand by different types of employers or characteristics of the supply of workers with certain skill levels or living in specific geographic areas. Recently hired less-skilled workers in small firms (fewer than 100 workers) are more likely to be younger (under age 25) than their counterparts in large firms. Less-skilled workers in

---

<sup>11</sup> Because not all of these characteristics are relevant to all employers' hiring, this information is more likely than employer characteristics to be missing. The sample of employers that provided answers for each characteristic is noted in the Exhibit.



**Exhibit II.3**  
**Demographic and Human Capital Characteristics by Employer Type**

	All	Size (%)			Industry (%)		Location (%)			
	(%)	<100	100+		Lower- wage	Higher- Wage	Nonrural	Rural		
<b>Sex (n=1050)</b>										
Male	48.1	54.6	42.2		44.9	49.2	48.5	45.7		
Female	51.9	45.4	57.8		55.1	50.8	51.5	54.3		
<b>Race/ethnicity (n=985)</b>										
White, Non-Hispanic	67.9	69.9	66.1		65.3	69.5	65.5	81.7	**	
Black, Non-Hispanic	13.6	9.3	17.5	*	18.4	11.0	15.0	5.6	**	
Hispanic	14.6	15.0	14.2		12.3	15.7	15.6	8.6	*	
Other	3.9	5.8	2.2	**	4.1	3.8	3.9	4.1		
<b>Immigrant Status (n=998)</b>										
Immigrant	6.0	5.9	6.1		6.5	5.8	6.9	0.8	**	
Non-Immigrant	94.0	94.1	93.9		93.5	94.2	93.1	99.2	**	
<b>Age (n=968)</b>										
Less than 25	23.0	31.4	14.7	**	32.8	17.9	**	21.6	31.0	*
25 to 44	60.9	55.7	65.9		45.0	69.3	**	61.4	58.0	
45 or Older	16.1	12.9	19.3		22.2	12.7		17.1	11.0	
<b>Education (n=961)</b>										
Less than HS	8.5	13.2	4.2	**	10.3	7.9		8.2	10.1	
HS/GED	70.4	61.4	78.8	**	71.2	70.0		71.6	64.0	
Some College	15.5	21.6	9.9	**	14.4	15.7		14.7	19.7	
Associate, College, Graduate, or Professional Degree	5.6	3.9	7.1		4.1	6.3		5.5	6.1	

(Table Continues)

**Exhibit II.3 (Continued)**  
**Demographic and Human Capital Characteristics by Employer Type**

	<b>All (%)</b>	<b>Size (%)</b>			<b>Industry (%)</b>			<b>Location (%)</b>	
		<b>&lt;100</b>	<b>100+</b>		<b>Lower- wage</b>	<b>Higher- Wage</b>		<b>Nonrural</b>	<b>Rural</b>
<b>Currently enrolled in school? (n=966)</b>									
Yes	15.1	19.6	10.6	**	23.5	10.8	**	15.5	12.9
No	84.9	80.4	89.4	**	76.5	89.2	**	84.5	87.1
<b>Had Specific Technical or Skills training (n=959)</b>									
Yes	40.0	48.4	32.2	**	28.0	46.5	**	40.9	34.6
No	60.0	51.6	67.8	**	72.0	53.5	**	59.1	65.4

\*\* p < .05 \* p < .10

Source: Authors' tabulations of the Survey of Employers in the Low-Skill Labor Market.

lower-wage industries are similar to their counterparts in other industries with respect to their sex, race/ethnicity, and immigration status, but differ somewhat in age. Recently hired less-skilled workers in lower-wage industries are less likely to be in their prime earning years (ages 25 to 44) than those in other industries. Indeed, about one-third of those in lower-wage industries are under age 25 and nearly one quarter are age 45 or older whereas fewer than one in five such workers in other industries are very young and only about one in ten are 45 or older. There are also differences across firm location. Recently hired less-skilled workers in rural areas are more likely to be white, younger, and native born than those in nonrural areas.

A worker's education and training play an important role in the job held. Although the jobs in our sample do not require more than a high school education, workers with a range of education and prior skill training hold these jobs. Exhibit II.3 shows that 8.5 percent of recently hired less-skilled workers have not completed high school and almost 80 percent have no more than a high school education. More than a fifth of employees filling these jobs have at least some college education. In addition, some recently hired workers (15.1 percent) are still enrolled in school at some level.<sup>12</sup> Interestingly, 40.0 percent of workers in these jobs have had some specific skills training. Together, these facts suggest that although these are less-skilled jobs, the pool of workers filling these jobs are not all less-skilled workers.

The education and training of less-skilled workers varies a bit across firm size, industry, and location. The distribution of educational attainment is more spread out in small firms—workers are more likely to have not completed high school or to have some

---

<sup>12</sup> School enrollment for the more recently hired worker is somewhat higher than average for interviews conducted in June and July, suggesting that some of the jobs in the sample were “summer jobs” filled by high school and college students.

post-secondary education than those in larger firms. Those that work in smaller firms are more likely to have some specific skill training and to be enrolled in school than their counterparts in larger firms. These results are compatible with the idea that smaller employers, with presumably less hierarchy and more direct monitoring of any given worker than larger employers, are more flexible in their hiring decisions, whereas larger employers tend to match educational attainment to job requirements better. It could also be that the variation in skill requirements is greater among small firms.

Less-skilled recently hired workers in lower- and higher-wage industries have similar education levels, but those in lower-wage industries are more likely to be enrolled in school than their counterparts in other industries and less likely to have specific skill training. Finally, differences in education, enrollment status and skill training between rural and nonrural employers are not large.

Above, we have described the noncollege labor market in terms of the characteristics of employers that have recently filled a noncollege job and the characteristics of workers that have taken those jobs. As such, our analysis is based on matches between workers and employers. In the following section, we assess how employers identified the workers they hired as well as the factors that are important in the hiring process.

### III. Hiring for Less-skilled Jobs

Less-skilled job seekers and others helping to place these workers can benefit from knowing what methods employers use to fill less-skilled jobs, how they differ across types of employers, and what employee attributes are viewed as most important in hiring. We asked employers about the methods they used to identify the most recently hired less-skilled worker and what factors were most important in hiring that worker.

The method most commonly used by employers to identify less-skilled workers was advertising, covering 45.7 percent of recently filled noncollege jobs (Exhibit III.1).<sup>13</sup> This includes classified ads, local media, help wanted signs and internet postings. For those noncollege jobs filled through advertising, employers report that about one-third came through an internet posting (not shown). A little more than a fifth of noncollege jobs were filled using referrals from other employees or employers (22.8 percent) and for roughly another fifth, the employee filled out an application or walked in without a referral (18.0 percent). A small number of employers reported using intermediaries to help with hiring. About 6 percent of noncollege jobs were filled by employers using a private or temporary employment agency and 4.6 percent using a public agency—either the state or local employment service, department of labor, welfare office or other public agency.

There are some differences in methods used to identify new hires by firm size and location. Recently hired less-skilled workers in larger firms are less likely than those in small firms to have been hired through referrals or applications/walk-ins without referrals. They are more likely to be found through advertising, likely due to the relative

---

<sup>13</sup> Employers were asked to provide one response to how they identified the worker most recently hired to fill a noncollege job. Thus these responses reflect the distribution of “successful” hiring methods rather than all methods used by employers to identify applicants for less-skilled positions.

**Exhibit III.1**  
**Method Employer Used to Identify Employee for Recently Filled Noncollege Job by Employer Type**

<b>Search Method</b> (n=1029)	<b>All (%)</b>	<b>Size (%)</b>		<b>Industry (%)</b>		<b>Location (%)</b>	
		<100	100+	Lower-wage	Higher-wage	Nonrural	Rural
Public Agency	4.6	5.1	4.1	3.8	5.0	4.5	5.0
Private or Temporary Agency	6.2	5.0	7.2	3.4	7.7*	6.6	3.8
Referral	22.8	31.1	15.2**	17.2	25.8*	22.8	23.0
Advertisement	45.7	31.7	58.4**	51.8	42.4	48.8	27.7**
Application/walk-in without referral	18.0	23.0	13.5**	22.7	15.5	14.8	36.7**
Other	2.7	4.0	1.6*	1.2	3.5**	2.5	3.9

\*\* p < .05 \* p < .10

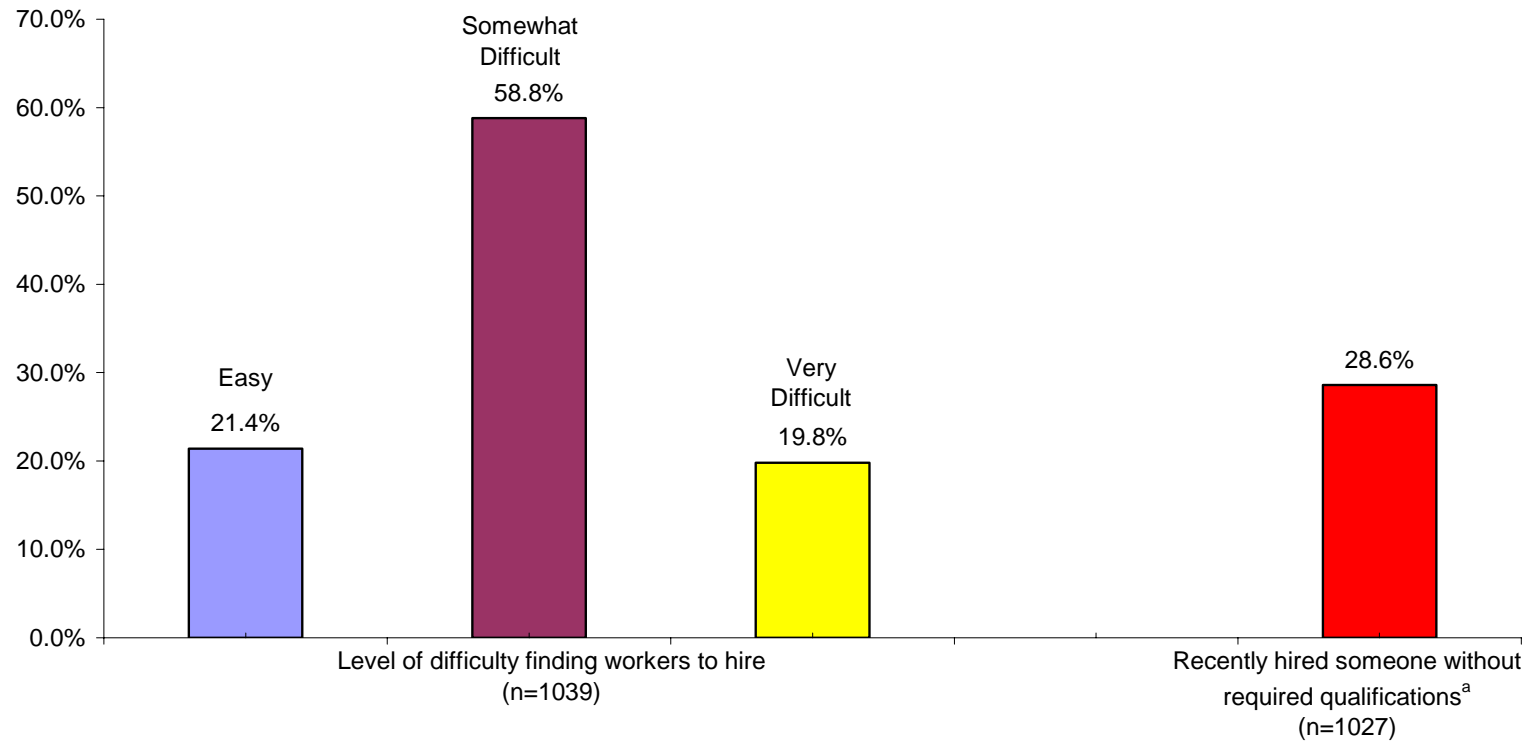
Source: Authors' tabulations of the Survey of Employers in the Low-Skill Labor Market.

cost of these methods. There are few differences in the methods used to find employees across higher-wage and lower-wage industries. Noncollege jobs in rural and nonrural areas are equally likely to be filled using agencies and referrals, but those in rural firms are more likely to be filled through applications/walk-ins without referral and less likely to be filled through advertisements than those in nonrural areas.

In addition to the search methods they used in hiring, we asked employers about contact with agencies trying to place welfare recipients. Of all less-skilled jobs in our sample, for 18.5 percent the employer reported a public or private agency had tried to place welfare recipients with them in the past year. This was much more common for large firms and firms in lower-wage industries. The most common types of agencies approaching employers include a community agency or nonprofit (74.3 percent), the state employment agency (68.8 percent), local one-stop centers (56.7 percent), and commercial temporary help agencies (54.6 percent). Employers generally reported that the quality of the candidates they were sent from these agencies was about average compared to other candidates for their noncollege jobs.

The ease or difficulty of finding qualified workers varies over the business cycle, even for lower-skilled positions. Past research is consistent with this finding. For example, many studies attribute a substantial portion of the high rates of employment of welfare recipients after welfare reform to the robust economy (Blank 2002). Our survey of employers was administered in 2007, in a moderate economy with a relatively low national unemployment rate (below 5 percent in 2007 (Bureau of Labor Statistics 2008)). Yet even for jobs with limited educational requirements, a substantial group of employers report difficulty finding workers to hire. Exhibit III.2 shows that for almost one-fifth of

**Exhibit III.2**  
**Difficulty Finding Workers for Noncollege Jobs**



<sup>a</sup> Question asks if in the past two years employer has hired someone into a position requiring HS diploma/GED degree or less who did not meet all of usual qualifications because really needed the employee

Source: Authors' tabulations of the Survey of Employers in the Low-Skill Labor Market.



all less-skilled jobs employers report it was very difficult finding workers. For only about a fifth of jobs do employers report it is easy to find workers. This difficulty varies across types of employers, with more small firms and firms in higher-wage industries and rural firms finding it very difficult to find employees (Exhibit III.3). The employers of almost a third of all recently hired less-skilled workers in rural areas report it is very difficult to find less-skilled workers.

These difficulties finding workers are mirrored in the finding that for 28.6 percent of all less-skilled jobs, employers report having recently hired someone who “did not meet all of the usual qualifications” because the employer really needed employees. Not surprisingly, the types of employers reporting difficulty finding workers were more likely to have hired someone without required qualifications. The employers of almost a third of recently hired less-skilled workers in small firms and about half of those in rural firms reported hiring employees with less than the usual qualifications.

### **What Employers Look For in New Hires**

Once a potential candidate is identified, employers rely on a number of factors in deciding whom to hire. Employers reported the importance in hiring (a lot, some, not at all) for each of a set of possible factors (Exhibit III.4).<sup>14</sup> The factors most commonly reported to matter a lot in hiring for the most recently filled less-skilled job relate to attitude and the job interview. For more than three-quarters of these less-skilled jobs, employers report that having a positive attitude, a desire to work hard, and a good job interview mattered a lot in the hiring decision. Not surprisingly, employers report that

---

<sup>14</sup> We asked employers “How much did each of the following factors weigh into your decision to hire [employee] for this position—a lot, some, or not at all?”

**Exhibit III.3**  
**Difficulty Finding Workers for Noncollege Jobs by Employer Characteristics**

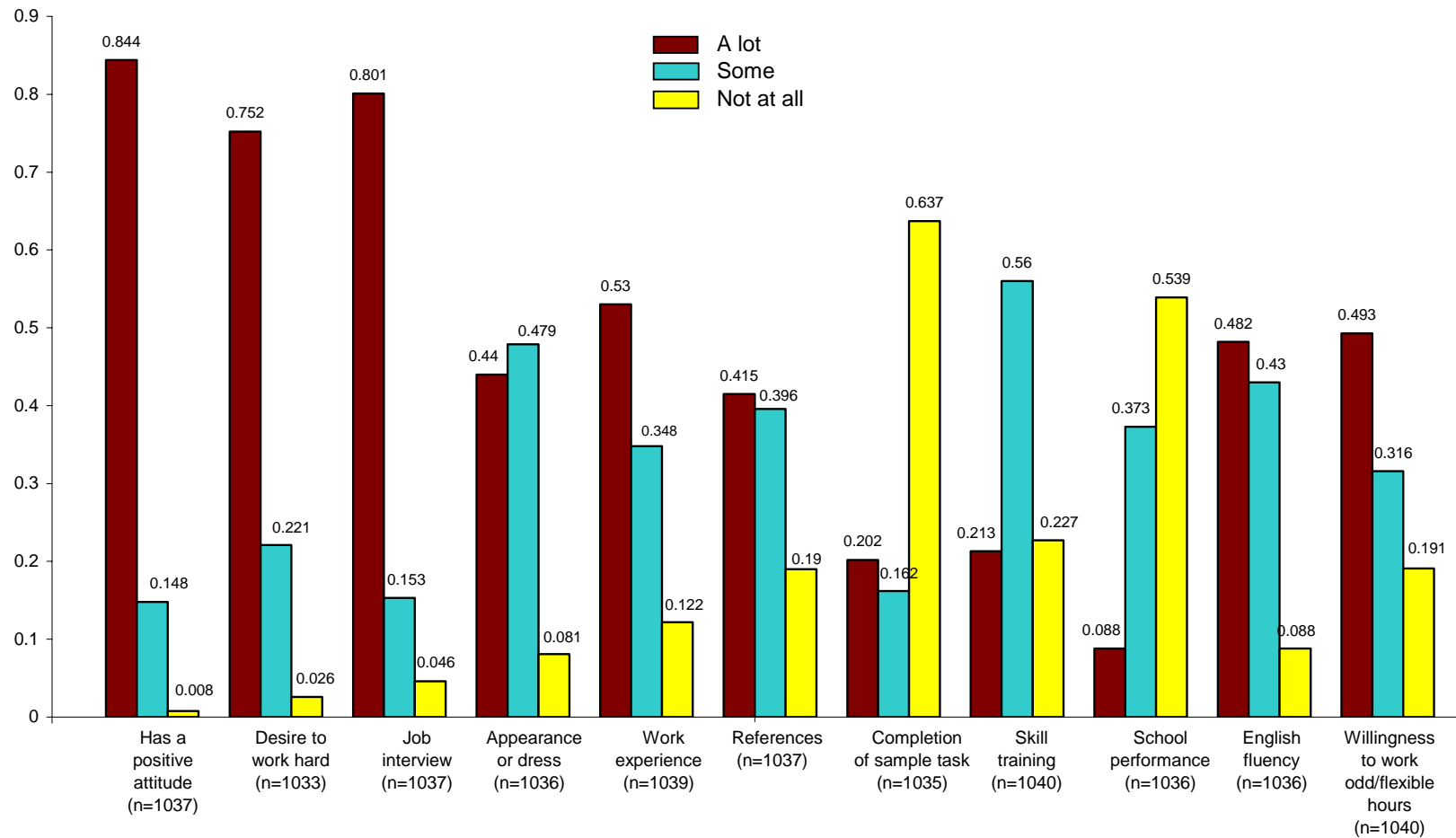
	All (%)	Size (%)			Industry (%)			Location (%)		
		<100	100+		Low Wage	High Wage		Nonr ural	Rural	
<b>Level of difficulty finding workers to hire (n=1039)</b>										
Easy	21.4	21.6	21.2		17.8	23.4		21.5	20.8	
Somewhat difficult	58.8	48.7	67.6	**	67.1	54.0	*	60.9	46.3	**
Very difficult	19.8	29.7	11.1	**	15.1	22.6	*	17.6	32.9	**
<b>Recently hired someone without required qualifications<sup>a</sup> (n=1027)</b>										
	28.6	35.3	22.7	**	25.1	30.7		25.0	51.0	**

<sup>a</sup> Question asks if in the past two years employer has hired someone into a position requiring HS diploma/GED or less who did not meet all of usual qualifications because really needed the employee

\*\* p < .05 \* p < .10

Source: Authors' tabulations of the Survey of Employers in the Low-Skill Labor Market.

### Exhibit III.4 Important Factors in Employer Hiring for Recently Filled Noncollege Jobs



Source: Authors' tabulations of the Survey of Employers in the Low-Skill Labor Market.

these factors do not matter at all for less than 5 percent of these jobs. These results match with previous research that reported the importance of “soft skills” to employers (Holzer and Stoll 2001; Holzer 1996). Employers report that appearance or dress mattered a lot in the hiring decision for a smaller percentage of hires, 44.0 percent.

A second set of factors important to many employers relate to worker skills including past work experience, references, and specific skills. For more than half of recently-filled less skilled jobs (53.0 percent), employers report that work experience was a key factor in hiring and for 41.5 percent references matter a lot. For only about one-fifth of these jobs do employers report that completion of a sample task or specific skill training matters a lot for hiring. In addition, for only 8.8 percent is school performance very important while for more than half of less-skilled jobs it is not applicable or doesn't matter at all. English fluency matters a lot for almost half of these jobs (48.2 percent) but does not matter at all or is not applicable for 8.8 percent.

Finally, a willingness to work odd or flexible hours is important in hiring for many of these less-skilled jobs. Employers report that for almost half (49.3 percent) this mattered a lot in hiring, and for only 19.1 percent does it not matter at all.

In addition to these factors, many employers report using a variety of checks and tests to evaluate prospective workers or new hires. Employers report conducting a criminal background check on 49.0 percent of recently hired less-skilled workers and other specific tests or checks for 49.1 percent (Exhibit III.5). For noncollege jobs where employers conduct other checks or tests, the most common is a drug test, administered for 83.8 percent of jobs. A quarter or more of recent noncollege hires are given a skill-related test, including verbal, math, and job-related skills tests. A smaller percent of hires

**Exhibit III.5**  
**Testing and Checks on Recently Hired Workers for Noncollege Jobs**

	All (%)	Size (%)			Industry (%)		Location (%)		
		<100	100+		Lower- Wage	Higher- Wage	Nonrural	Rural	
<b>Conduct criminal background check</b> (n=1039)	49.0	32.7	63.3	**	55.1	44.0	50.6	39.6	*
<b>Give other tests</b> (n=1041)	49.1	33.4	63.0	**	42.9	50.8	50.2	42.6	
<b>Specific tests conducted</b> (of employers that tested) (n=432)									
Drug	83.8	76.9	87.1	*	86.8	82.4	83.8	84.2	
Math	29.6	24.1	32.2		38.8	25.3	31.4	16.7	
Verbal	27.8	21.6	30.7		36.4	23.7	30.7	6.8	**
Job-related skills	23.0	20.1	24.4		10.8	28.7	23.7	18.3	
Psychological	13.7	7.8	16.5		35.4	3.5	15.2	3.4	
Physical	2.8	3.4	2.5		2.3	3.1	3.1	0.8	
Credit Check	1.5	3.1	0.7		1.8	1.4	1.6	1.1	
Driving	0.1	0.1	0.1		0.3	0.1	0.1	0.4	
Other	2.7	4.2	1.9		3.6	2.2	2.4	4.7	

\*\* p < .05 \* p < .10

Source: Authors' tabulations of the Survey of Employers in the Low-Skill Labor Market.

are given other tests including psychological tests, physicals, driving tests, and credit checks.

The extent to which employers conduct criminal background checks and test noncollege hires varies by firm characteristics. Jobs in small firms are less likely to require criminal background checks (32.7 percent v. 63.3 percent) and other tests (33.4 percent v. 63.0 percent) than jobs in large firms. However, for jobs that do have tests, the distribution of types of tests conducted is similar across firm size. Recent hires in lower-wage industries are somewhat more likely to be subjected to criminal background checks and less likely to take other tests, but these differences are not statistically significant. The most commonly conducted tests differ somewhat across these industry groups as well, with jobs in lower-wage industries less likely to require job-related skills tests.

### **Willingness to Hire from Disadvantaged Groups**

An impetus behind studies of employers in the low-wage labor market is to understand the extent to which there is willingness to hire workers in certain disadvantaged groups particularly those receiving public assistance and those who have been incarcerated. Past research on employers' willingness to hire welfare recipients has shown most employers respond positively (Holzer and Stoll 2001). We also find this result. As shown in Exhibit III.6, almost all recently filled noncollege jobs, 97.9 percent, employers report they would be willing to hire a current or former welfare recipient. However, according to the employer, only 3 percent of recently hired less-skilled female workers were current or former welfare recipients.<sup>15</sup> This low number in part reflects

---

<sup>15</sup> This was only asked of employers whose most recent hire was female, given that the vast majority of welfare recipients are women.

**Exhibit III.6**  
**Employer Willingness to Hire Disadvantaged Workers for Noncollege Jobs**

	All (%)	Size (%)			Industry (%)		Location (%)	
		<100	100+		Lower- Wage	Higher- Wage	Nonrural	Rural
<b>Recent hire is a welfare recipient<sup>a</sup> (n=565)</b>								
Yes	3.2	3.8	2.8		3.8	2.9	3.3	2.9
No	55.6	71.6	44.2	**	61.3	52.2	55.2	57.9
Don't Know	41.1	24.6	52.9	**	34.9	44.9	41.5	39.2
<b>Willing to hire welfare recipient<sup>b</sup> (n=1042)</b>	97.9	96.3	99.2	*	98.8	97.3	97.8	98.1
<b>Willing to hire ex-offender (n=1012)</b>								
Yes	21.0	17.1	24.3		26.9	17.5	21.7	16.8
Yes, depending on crime	35.1	34.6	35.5		25.7	40.6	** 33.6	44.2 *

<sup>a</sup> Only asked if recent hire is female (51.9% of sample).

<sup>b</sup> Includes employers that reported recent hire is a welfare recipient.

\*\* p < .05 \* p < .10

Source: Authors' tabulations of the Survey of Employers in the Low-Skill Labor Market.

diminishing welfare rolls and in part reflects employers' lack of knowledge about workers' benefit receipt. For a large percentage of recently filled noncollege jobs, 41.1 percent, the employer reports not knowing whether the recent hire is a current or former welfare recipient.

Employers are willing to hire those with a criminal record for many fewer jobs. For only one-fifth of all noncollege jobs did employers report they would be willing to hire an ex-offender. This is somewhat lower than was found in previous research, although the large differential between willingness to hire welfare recipients and those with a criminal record is similar.<sup>16</sup> In addition, the employers of another 35.1 percent of recently hired less-skilled workers would be willing to hire an ex-offender depending on the specific crime. Employer consideration of criminal background is also reflected in the substantial numbers of jobs for which employers conduct criminal background checks described above.

Employer willingness to hire welfare recipients is high across firm size, industry, and location, but willingness to hire ex-offenders varies some by firm characteristics and depends on the crime, particularly among employers in higher-wage industries and in rural areas.

---

<sup>16</sup> Holzer (1996) found that about 30 to 35 percent (depending on geographic area) of employers with noncollege jobs were willing to hire workers with criminal records compared to from 82 to 86 percent willing to hire welfare recipients.



#### **IV. Job Requirements**

Even among a set of jobs that do not require more than a high school degree, the specific requirements of the jobs vary. As Maxwell (2006) points out (discussed earlier), less-skilled jobs are not necessarily no-skilled jobs. In fact, some of the jobs that require no formal education beyond high school may require formal skill certification or training or significant amounts of specific work experience. One question is the extent to which this sample of jobs with limited educational requirements is accessible to “entry-level” workers who have limited prior work experience or training.

We asked employers about the importance of education, job-specific experience, and prior training or skill certification as job requirements for the most recently filled job that did not require a college degree. Having a high school degree or GED is an important requirement for a substantial number of these jobs (Exhibit IV.1). Employers report that for over half of these less-skilled jobs (54.3 percent), this level of education is extremely important or required. For somewhat fewer jobs (40.5 percent), prior experience in the same line of work is extremely important or required, and for 27.3 percent of less-skilled jobs, prior training or skill certification is extremely important or required. In combination, we find that all three of these requirements are extremely important in 17.7 percent of the entire sample. This shows that almost one-fifth of these noncollege jobs not only demand a high school degree or GED but also have significant requirements for prior experience and training.

The requirements of noncollege jobs vary by firm characteristics. Among noncollege jobs, those in large firms are more likely than those in small firms to be with employers reporting that having a high school degree or GED or having prior job-specific

**Exhibit IV.1**  
**Importance of Education, Experience, and Specific Tasks for Recently Filled Noncollege Job by Employer Type**

	All (%)	Size (%)			Industry (%)		Location (%)		
		<100	100+		Lower- Wage	Higher- Wage	Nonrural	Rural	
<b>Importance of HS/GED (n=1052)</b>									
Extremely/required	54.3	43.9	63.3	**	51.3	56.0	55.9	44.6	*
Somewhat	26.0	27.0	25.2		30.2	23.6	25.3	30.1	
Not very	19.7	29.2	11.5	**	18.5	20.4	18.8	25.3	
<b>Importance of experience in this line of work (n=1058)</b>									
Extremely/required	40.5	35.2	45.0		38.0	41.9	43.0	25.7	**
Somewhat	38.2	37.0	39.3		39.0	37.7	36.6	47.6	*
Not very	21.3	27.8	15.7	**	23.0	20.4	20.4	26.7	
<b>Importance of some previous training or skill certification (n=1057)</b>									
Extremely/required	27.3	24.6	29.6		34.3	23.2	28.4	20.7	
Somewhat	40.0	42.4	38.0		30.3	45.7	**	39.7	42.1
Not very	32.7	33.0	32.4		35.5	31.1		31.9	37.1
<b>All three extremely important (n=1056)</b>	17.7	11.0	23.5		25.1	13.4		19.3	8.0 *

\*\* p < .05 \* p < .10

Source: Authors' tabulations of the Survey of Employers in the Low-Skill Labor Market.

experience is extremely important. Counter to expectations, previous skill training or skill certification is extremely important in more lower-wage industry jobs (34.3 percent) than higher-wage industry jobs (23.2 percent). For jobs in rural areas, employers are less likely to report that either high school education or prior related experience is extremely important than for jobs in nonrural areas. Similarly, many fewer jobs in rural areas (8.0 percent) describe all three of these factors as extremely important compared to nonrural jobs (19.3 percent).

To better understand how these job requirements interact with workers' actual characteristics, we examine the overlap between job requirements and workers' education level and prior technical/skills training (both as reported by the employer) (Exhibit IV.2).<sup>17</sup> As expected, workers with at least a high school degree or GED are much more likely to hold jobs where this is an extremely important requirement, 61.1 percent, than jobs where it is not very important, 13.1 percent. Likewise, workers without this level of education are much more likely to hold jobs where this requirement is not very important, 68.4 percent, than where it is extremely important, 9.7 percent. However, the fact that even some workers without a high school degree hold these jobs suggests there is some fluidity in these requirements, and other employee characteristics may be entering into the hiring decision. In addition, this finding is consistent with the earlier result that some employers are having a hard time finding workers with required qualifications. This suggests that not having a high school degree excludes workers from some of these jobs, but not as many as the listed job requirements would suggest.

---

<sup>17</sup> We did not ask the employer about the workers' prior job-specific experience. The cases where the employer reports not knowing the education or prior technical/skills training of the worker are dropped from the table. It is possible that employers who report these characteristics as not very important for the job are more likely to report they do not know whether the employee has them or not.

**Exhibit IV.2**  
**Importance of Job Requirements by Skills of Recently Hired Employee**

	<b>Has HS/GED (%)</b>		<b>Has Technical/skills Training (%)</b>	
	Yes	No	Yes	No
<b>Importance of HS/GED (n=957)</b>				
Extremely/required	61.1	9.7	**	
Somewhat	25.8	21.9		
Not very	13.1	68.4	**	
<b>Importance of some previous training or skill certification (n=959)</b>				
Extremely/required			39.1	22.3 *
Somewhat			40.4	37.9
Not very			20.5	39.8 **

\*\* p < .05 \* p < .10

Source: Authors' tabulations of the Survey of Employers in the Low-Skill Labor Market.

We should also remember that only 8.5 percent of workers in less-skilled jobs have less than a high school education, far less than even the reported 19.7 percent of jobs where having a high school degree is not very important. Of course, this is the set of workers holding less-skilled jobs, not the set of individuals seeking less-skilled jobs. Job seekers lacking a high school education or other skills may have greater difficulty getting hired, even for jobs with few requirements. Disadvantaged populations, in particular, have far greater percentages of people without a high school education. Of current welfare recipients, 41.5 percent have less than a high school education (Loprest and Zedlewski 2006) and about 60 percent of offenders and ex-offenders lack a high school degree (Travis et al 2001).

The match between jobs requiring specific training or certification and workers with prior technical skills training is less pronounced than for high school degree. Those workers with prior technical skills training are as likely to be in jobs where specific skills are extremely important as in jobs where it is only somewhat important. And a fifth of workers with this prior skills training are in jobs where specific training is not very important. Similarly, more than a fifth of those without prior technical skills training hold jobs where prior specific skill training is an extremely important requirement. These results suggest that there may be a mismatch between the specific type of technical skills training that workers have and the types of skill training and certification that employers want. This also suggests, not surprisingly, that having some type of prior skills training is not necessarily a good substitute for the specific kind of skills training an employer is seeking. Our earlier results showed that 40 percent of recently hired less-skilled workers

have previous specific technical skills or skills training, while only about a fifth of these jobs report this type of prior training or certification is extremely important.

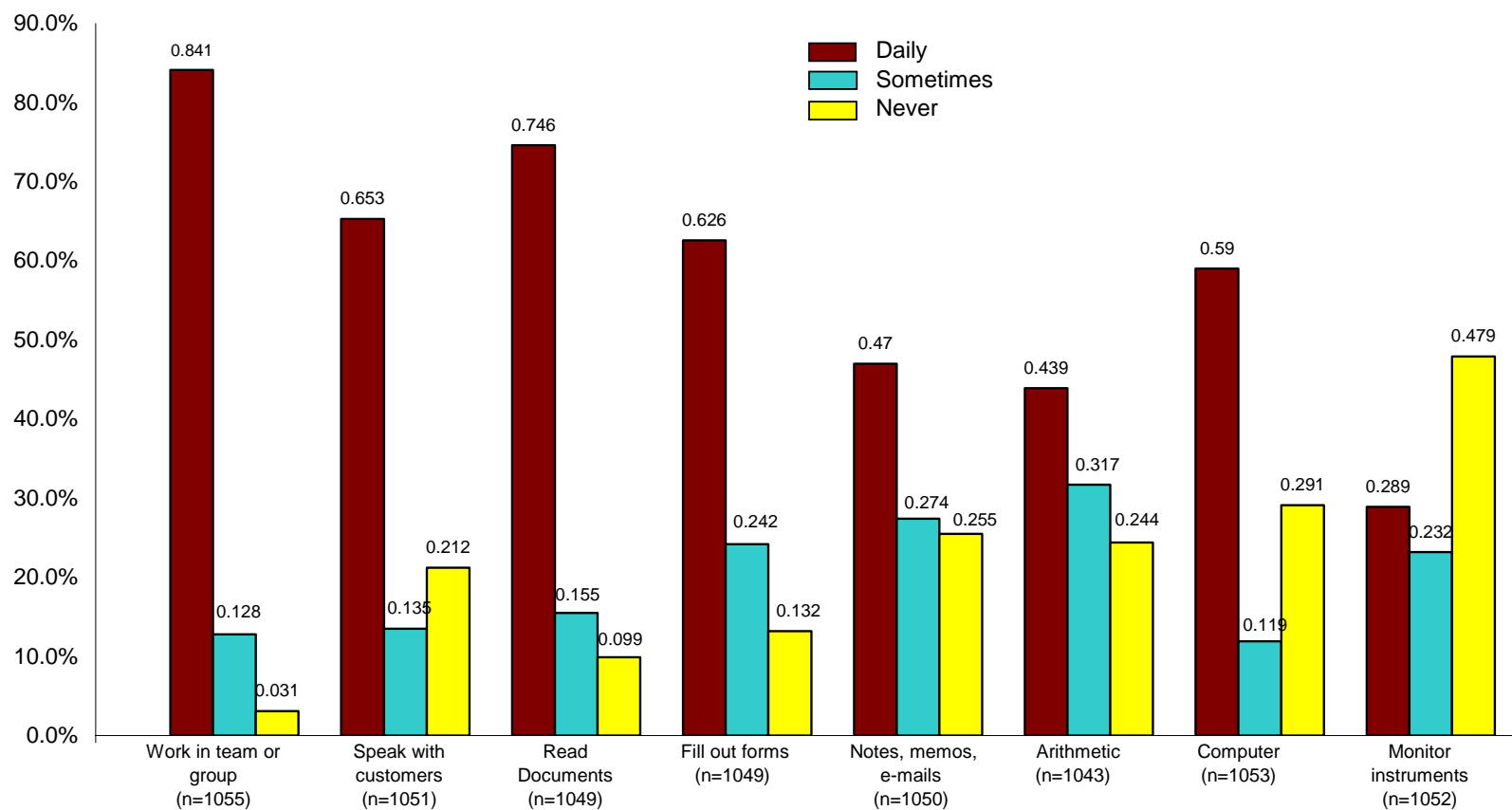
### **Specific Job Tasks**

Beyond these broad job requirements, there is significant variation across the specific tasks workers in these less-skilled jobs perform. Many of these jobs include multiple specific tasks requiring some level of skill. For each of eight tasks, we asked employers if the employee performs the task daily, sometimes or never. Results are shown in Exhibit IV.3. We divide the tasks into two groups, communication tasks and cognitive tasks (e.g., reading, writing, or arithmetic skills).

Communicating with others is a common function within many of these jobs. The most commonly reported task is working in a team or group, which 84.1 percent of employees do daily and only 3 percent never do. Also, about two-thirds of employees must speak with customers daily.

Reading and writing in some form are also fairly common tasks. About three-quarters of employees must read documents daily and almost two-thirds fill out forms daily. Almost half daily write notes, memos, or e-mails. Slightly fewer use arithmetic on the job every day, 43.9 percent. A relatively large proportion, 59 percent, uses computers in their daily work. The most infrequent task is monitoring instruments, which 28.9 percent of employees do daily and 47.9 percent never do. The ability to perform some of these cognitive tasks is likely related to educational attainment, although we do not have information on the skill level at which these tasks are performed. The relatively high

**Exhibit IV.3**  
**Frequency of Specific Tasks for Recently Filled Noncollege Job**



Source: Authors' tabulations of the Survey of Employers in the Low-Skill Labor Market.

percentage of jobs frequently using computers suggests this is an important skill for job seekers.

### **Jobs with Minimal Requirements**

As we've seen many of these less-skilled jobs have experience and training requirements and frequent tasks that use specific skills. This raises the question of how many of these less-skilled jobs are truly "entry-level" jobs, that is jobs that might be suitable for job seekers with little prior experience, training, or education. Jobs with minimal requirements may be the most accessible to new labor market entrants. Given our data, there are several ways to define jobs with minimal requirements. Exhibit IV.4 shows several of these definitions and the percentage of less-skilled jobs that fall into each category.

A restrictive measure of minimal requirements is jobs for which high school education, prior related experience, and specific training are all reported to be not very important. Only 8.0 percent of less-skilled jobs fall into this category. Thus only a small fraction of all less-skilled jobs have requirements that are a match for workers with minimal experience and skill training and lacking a high school degree. Because many workers have a high school degree or GED, we also consider an expanded definition that includes jobs where high school education is somewhat important but prior experience and skill training are not. The fraction of less-skilled jobs meeting this expanded definition increases to 14.1 percent. Another way of defining minimal-requirement jobs is those on which cognitive tasks (specifically the eight tasks described earlier) are only sometimes or never performed. Because we don't know the cognitive skill level of the



**Exhibit IV.4**  
**Noncollege Jobs with Minimal Requirements by Various Definitions**

Different Ways of Defining Minimal Requirements	All (%)	Size (%)			Industry (%)		Location (%)	
		<100	100+		Lower-Wage	Higher Wage	Nonrural	Rural
<b>HS education, prior related experience, and specific training all not very important (n=1058)</b>	8.0	11.9	4.7	**	7.8	8.3	7.9	8.8
<b>HS education somewhat or not very important, prior related experience and training not very important (n=1058)</b>	14.1	19.7	9.3	**	16.0	13.0	14.0	15.1
<b>Cognitive Tasks Rarely / Never Performed<sup>a</sup></b>								
All never (n=1054)	3.5	4.0	3.1		1.6	4.6	3.3	5.1
All sometime or never (n=1052)	11.9	14.1	10.1		9.2	13.5	11.6	14.1
<b>HS education, prior related experience, and specific training all somewhat or not very important (n=1055)</b>	31.8	38.4	26.0	**	37.0	28.8	30.4	40.0 *

\*\* p < .05 \* p < .10

<sup>a</sup> Includes reading documents, filling out forms, taking notes or writing memos or e-mails, using arithmetic, using a computer, and monitoring instruments

Source: Authors' tabulations of the Survey of Employers in the Low-Skill Labor Market.

specific tasks, this is a very tight definition of jobs with minimal requirements. For only a small number of less-skilled jobs, 3.5 percent, do workers never perform any of these tasks. Even when including jobs that only sometimes perform these tasks, only 11.9 percent of less-skilled jobs have these minimal requirements.

A less restrictive definition of jobs that might be more accessible to entry-level workers includes all jobs where high school education, prior related experience, and specific training are all somewhat or not very important. This set of jobs excludes those where high school education or job-related experience or training are required or very important. This set comprises almost a third of less-skilled jobs, 31.8 percent.

Across many of these definitions, jobs with more minimal requirements are more commonly found in small firms than large firms. However, there is little difference between lower- and higher-wage industries or rural and nonrural locations.

These results suggest that even though all the jobs in our sample are “less-skilled” in the sense of not requiring more than a high school education, there is only a limited number that truly have minimal job requirements. This does not mean these are the only jobs entry-level or low-skill workers can get—as we saw earlier, individuals do hold jobs for which they do not meet the stated requirements. However, it does suggest that there is a large set of jobs that become more accessible as workers gain experience and training and for those who have a high school education or GED. Later in this report, we discuss some of the differences in the attributes of jobs with more minimal requirements compared to those with higher requirements.

## **V. Wages and Benefits of Less-skilled Workers**

Median wage in the US is about \$18 an hour; thus, it is not surprising to see that less-skilled workers are paid considerably less than the median. Exhibit V.1 shows that the median wage for recently hired less-skilled workers is \$11 an hour in 2007; the mean wage is higher at \$12.30. Wages are clustered around the median, with wages at the 25<sup>th</sup> percentile of \$8.50 an hour and at the 75<sup>th</sup> percentile of \$14.50 an hour. Near the top of the distribution, wages of recently hired less-skilled workers are higher, about \$20.63 an hour at the 90<sup>th</sup> percentile.

Hourly wage rates vary by employer size, industry, and location, although differences in mean wages are only statistically significant between locations.<sup>18</sup> As expected, smaller employers pay less than larger ones, on average. The mean wage for recently hired less-skilled workers in small firms is \$11.65 an hour, but for those in larger firms it is \$12.90 an hour; the median wages are \$10.00 and \$12.00 an hour for those in small and large firms, respectively.<sup>19</sup> This difference holds over the entire wage distribution.

As expected, the wages of recently hired less-skilled workers are lower for those employed in lower-wage industries than for their counterparts in other industries. The gap is more than \$2 at the mean and is at least this large at the median and 75<sup>th</sup> percentile and slightly smaller at the 25<sup>th</sup> percentile. Surprisingly, at the 90<sup>th</sup> percentile, wages are higher in lower-wage industries than in higher-wage industries, indicating the considerable variation in wages within and between industries.

---

<sup>18</sup> We do not test for significant differences in percentile wages across groups.

<sup>19</sup> There is considerable clustering of reported wage rates at 25 cent increments and especially at whole dollar amounts. As such, median wages for the total sample and median wages for some subsamples will be identical even if the wage differs for a complementary subsample.

**Exhibit V.1**  
**Hourly Wages of Employees in Recently Filled Noncollege Jobs by Employer Type**

	All	Size		Industry		Location	
		<100	100+	Lower-Wage	Higher-Wage	Nonrural	Rural
<b>Hourly Wage</b> (n=951)							
Mean	\$12.30	\$11.65	\$12.90	\$10.86	\$13.08	\$12.71	\$9.90 **
25th percentile	\$8.50	\$8.00	\$9.00	\$7.25	\$9.00	\$8.50	\$7.50
Median	\$11.00	\$10.00	\$12.00	\$9.00	\$12.00	\$11.50	\$9.00
75th percentile	\$14.50	\$14.00	\$15.38	\$13.00	\$15.18	\$15.38	\$12.00
90th percentile	\$20.63	\$18.27	\$20.63	\$20.63	\$18.75	\$20.63	\$14.00
<b>Usually earns overtime/tips/bonuses or commissions?</b> (n=1052)	47.4	45.2	49.3	42.7	50.0	47.3	47.5

\*\* p < .05 \* p < .10

Source: Authors' tabulations of the Survey of Employers in the Low-Skill Labor Market.

Wage differences are even larger between recently hired less-skilled workers in rural areas compared to nonrural areas. At the mean the difference is \$9.90 v. \$12.71 and at the median \$9.00 v. \$11.50. This gap is even larger farther up in the distribution of wages. At the 75<sup>th</sup> percentile and 90<sup>th</sup> percentile the difference is \$3.38 and \$6.63, respectively. These results show that the wage distribution of less-skilled jobs among rural employers is more compact with fewer higher-wage jobs than in nonrural locations.

In addition to hourly wages, overtime pay, tips, and bonuses are available to about half of these workers. Extra work and compensation does not vary appreciably by size or location. However, only 40.6 percent of recently hired less-skilled workers in lower-wage industries can earn this supplementary income as compared with 51.0 percent of those in other industries.

Hourly wages for the most recently filled less-skilled jobs also vary by other employer characteristics. For example, Exhibit V.2 shows that less-skilled jobs at nonprofits pay less than those at for-profit employers (\$10.78 v. \$12.68) and that those at employers with high concentrations of union members pay more than those at non-union employers (\$18.11 v. \$11.73). Exhibit V.2 also provides a more detailed breakdown by employer size. Compared with the smallest employers (4 to 19 employees), less-skilled jobs with the largest employers (500 or more employees) pay significantly more per hour (\$13.83 v. \$10.77). Differences in median wages largely track differences in mean wages across these employer characteristics.

Exhibit V.3 shows how wages differ by the characteristics of the workers who fill these less-skilled jobs. Men earn \$13.66 an hour, significantly more than the \$11.15

**Exhibit V.2**  
**Mean Wage by Characteristics of Firms Filling Noncollege Jobs**

<b>Characteristic</b>	<b>Mean Wage</b>
<b>Size (n=951)</b>	
4-19	\$10.77
20-99	\$11.98 *
100-499	\$11.39
500+	\$13.83 **
<b>Higher-Wage or Lower-Wage Industry (n=951)</b>	
Higher-Wage	\$13.08
Lower-Wage	\$10.86
<b>Location (n=951)</b>	
Nonrural Area	\$12.71
Rural	\$9.90
<b>Minority Owned (n=927)</b>	
Yes	\$11.93
No	\$12.39
<b>Woman Owned (n=933)</b>	
Yes	\$11.91
No	\$12.33
<b>Minority or Woman Owned (n=918)</b>	
Yes	\$12.07
No	\$12.36
<b>Non-profit (n=945)</b>	
Yes	\$10.78 **
No	\$12.68
<b>Union shop (n=905)</b>	
Zero Percent	\$11.73
0-80 Percent	\$12.33
80-100 Percent	\$18.11 **
<b>Growing location? (n=932)</b>	
Growing	\$11.65
Shrinking	\$12.39
Stable	\$12.77

\*\* p < .05 \* p < .10

Source: Authors' tabulations of the Survey of Employers in the Low-Skill Labor Market.

**Exhibit V.3**  
**Mean Wage by Demographic and Human Capital Characteristics**

	<b>Wage</b>	
<hr/>		
<b>Sex (n=947)</b>		
Male	\$13.66	**
Female	\$11.15	
<b>Race/ethnicity (n=900)</b>		
White, Non-Hispanic	\$13.19	
Black, Non-Hispanic	\$10.23	**
Hispanic	\$11.46	*
Other	\$11.30	
<b>Age (n=885)</b>		
Less than 25	\$9.19	
25 to 44	\$12.84	**
45 or Older	\$15.89	**
<b>Immigrant Status (n=907)</b>		
Immigrant	\$10.67	*
Non-Immigrant	\$12.55	
<b>Education (n=875)</b>		
Less than HS	\$9.60	
HS/GED	\$12.67	**
Some College	\$12.13	*
Associate, College, Graduate, or Professional Degree	\$16.81	**
<b>Currently enrolled in school? (n=880)</b>		
Yes	\$9.79	**
No	\$13.01	
<b>Had Specific Technical or Skills training (n=873)</b>		
Yes	\$13.67	*
No	\$11.83	
<hr/>		

\*\* p < .05 \* p < .10

Source: Authors' tabulations of the Survey of Employers in the Low-Skill Labor Market.

earned by women. In addition, whites recently hired into less-skilled jobs earn more than blacks (\$13.19 v. 10.23), but their wage advantage over Hispanics and others is not statistically significant. Age is also associated with wage differentials with workers over age 44 earning more than those between the ages of 25 and 44 as well as those under age 25 (\$15.89 v. \$12.84 v. \$9.19). Further, native-born workers earn more than immigrants, on average (\$12.55 v. \$10.67).

Wages also vary by education and training. Those with a high school degree or more education earn significantly more than those who have not completed high school. The highest wages belong to college graduates (\$16.81) even though they are “over qualified” for their jobs as none of these less-skilled positions requires a college degree. Only 5.6 percent of our sample have a college degree. Students (those currently enrolled in school at some level) earn less than other recently hired workers. Finally, workers filling less-skilled jobs who have had specific technical or skills training earn more, on average, than those without such training (\$13.67 v. \$11.83).

In Exhibit V.4, we consider how wages vary by the requirements of recently filled less-skilled jobs. We focus on three criteria: the importance of a high school degree or GED, the importance of prior experience in similar jobs, and the importance of previous training or skill certification. Jobs in which a high school degree is extremely important pay \$13.87 an hour, on average—significantly more than jobs in which a degree is somewhat or not very important. Note that there is little difference in the wages of jobs in which a high school degree is somewhat or not very important (\$10.55 and \$10.63 an hour, respectively). The more important prior experience is for a recently filled less-skilled job, the higher the wage rate. Hourly wages average \$15.48 for jobs in which



**Exhibit V.4: Mean Wage by Importance of Education, Experience, and Specific Tasks for Recently Filled Noncollege Jobs**

	<b>Wage</b>	
<b>Importance of HS/GED (n=947)</b>		
Extremely/required	\$13.87	*
Somewhat	\$10.55	*
Not very	\$10.63	*
<b>Importance of experience in this line of work (n=951)</b>		
Extremely/required	\$15.48	*
Somewhat	\$10.85	*
Not very	\$9.37	*
<b>Importance of some previous training or skill certification (n=951)</b>		
Extremely/required	\$16.30	*
Somewhat	\$12.03	*
Not very	\$9.75	*
<b>All three extremely important (n=950)</b>		
Yes	\$17.98	*
No	\$11.25	
<b>Job-related experience and training not very important (n=951)</b>		
Yes	\$9.09	*
No	\$12.97	
<b>All three not very important (n=951)</b>		
Yes	\$9.43	*
No	\$12.57	

\*\* p < .05 \* p < .10

Source: Authors' tabulations of the Survey of Employers in the Low-Skill Labor Market.

prior experience is extremely important, \$10.85 for jobs in which it is somewhat important, and \$9.37 in jobs in which it is not very important. A similar pattern emerges when considering the importance of training or skill certification. Hourly wages average \$16.30, \$12.03, and \$9.75 in jobs in which training or skill certification are extremely, somewhat, and not very important, respectively.

When considering these requirements in combination, we find that recently filled less-skilled jobs in which all three criteria are extremely important or required pay considerably more than those in which at least one of the three is only somewhat or not very important: \$17.96 v. \$11.25 an hour. Jobs that have the lowest requirements, those in which a degree, prior experience, and previous training or certification are all not very important, pay on average \$9.43 an hour; in contrast, those in which at least one criterion is at least somewhat important pay \$12.57 an hour.

### **Employee Benefits**

In addition to wages, many employers filling less-skilled jobs offer benefits to some of their employees, but substantially fewer offer these benefits to their recently hired less-skilled employees. In part this is due to these workers' job tenure and work schedules. Employers report that most of the workers who are without benefits in firms that offer them could be covered if the worker worked more months or hours on the job.

Overall, 87.9 percent of recently filled noncollege jobs are in firms that offer health insurance or HMO membership to some of their employees (Exhibit V.5). However, only 69 percent of most recently hired less-skilled workers are offered this benefit. It is important to be clear that this does not mean that 69 percent of these

### Exhibit V.5

#### Employer-Provided Benefits of Recently Filled Noncollege Jobs by Employer Type

	All (%)	Size (%)		Industry (%)		Location (%)	
		<100	100+	Lower-Wage	Higher-Wage	Non-Rural	Rural
<b>Health Insurance or HMO</b>							
Employer offers to some employees at this firm (n=1049)	87.9	77.8	96.6 **	84.5	89.8	89.3	79.2 **
Worker in recently filled job was offered (n=1053)	69.0	54.8	81.3 **	62.1	73.0	70.2	62.0
Worker in recently filled job could become eligible with more hours or tenure (n=1047)	14.5	16.6	12.7	17.2	12.9	14.8	12.8
<b>Part of premium paid by employer for a typical worker (for firms that offer) (n=827)</b>							
All	15.5	22.1	10.9 **	10.2	18.3 **	14.5	21.9 *
Part	81.1	71.9	87.5 **	84.1	79.6	82.2	74.3 *
None	3.4	6.0	1.5 **	5.7	2.1 *	3.3	3.9
<b>Other family members can be covered (for firms that offer) (n=825)</b>	97.0	94.0	99.1 **	96.4	97.3	97.2	95.7
<b>Part of premium paid by employer for family members (for firms that offer) (n=729)</b>							
All	5.4	6.5	4.7	4.7	5.8	5.5	4.6
Part	78.3	63.1	88.0 **	78.8	78.1	80.9	60.3 **
None	16.3	30.4	7.3 **	16.5	16.1	13.6	35.1 **
<b>Pension or 401 K</b>							
Employer offers to some employees at this firm (n=1044)	79.6	61.3	95.4 **	76.0	81.7	81.0	71.2 **
Worker in recently filled job was offered (n=1049)	63.6	43.6	80.9 **	56.8	67.5	64.7	57.0
Worker in recently filled job could become eligible with more hours or tenure (n=1043)	12.3	13.6	11.1	15.4	10.5	12.8	9.0
<b>Paid Leave<sup>a</sup></b>							
Employer provides to some employees at this firm (n=1044)	87.4	77.3	96.1 **	84.6	89.1	87.9	84.3
Worker in recently filled job has this benefit (n=1047)	71.1	59.6	81.0 **	64.3	75.0	71.9	65.9
Worker in recently filled job could become eligible with more hours or tenure (n=1048)	10.7	11.3	10.1	14.0	8.7	10.4	12.1
<b>Recently hired worker can take time off to care for sick child/family member (n=1009)</b>							
Paid time off	53.4	37.1	67.4 **	55.0	52.4	54.7	45.2
Unpaid time off	97.1	95.6	98.3 **	96.9	97.2	96.8	98.9 **
Cannot take time off for this	2.9	4.4	1.7 **	3.1	2.8	3.2	1.1 **
<b>Other Benefits available for this job</b>							
Help paying for child care (n=1048)	6.6	2.9	9.8 *	5.9	7.0	6.7	5.5
Child care on site (n=1053)	5.5	2.2	8.4 *	9.2	3.5	6.2	1.8 *
Transportation aid (n=1053)	11.7	9.9	13.2	8.7	13.3	12.4	7.3
Help paying for education (n=1049)	44.3	23.1	62.8 **	46.0	43.4	46.2	33.3 *
Employee assistance plan (n=1044)	47.3	21.3	69.8 **	53.5	43.8	50.4	28.8 **

<sup>a</sup> Paid leave includes sick leave, paid vacation days, or paid personal days.

\*\* p < .05 \* p < .10

Source: Authors' tabulations of the Survey of Employers in the Low-Skill Labor Market.

workers have employer health insurance, only that they were offered that coverage by their employer. An additional 14.5 percent of less-skilled workers could become eligible for health insurance or HMO if they worked more hours or stayed on the job more months.

For less-skilled workers offered employer health insurance or HMO membership, most must pay part of the premium. Only 15.5 percent of these workers have employers who pay the entire premium. A small percentage (3.4 percent) must pay the entire premium. Family coverage is offered to almost all less-skilled employees who have an offer themselves. However, even fewer of these workers—5.4 percent—have employers that pay the entire premium and more—16.3 percent—must pay the entire additional premium.

Less-skilled jobs are slightly less likely to have employer provision of pensions or 401K plans than health insurance. Of all recently hired less-skilled workers, 79.6 percent work for employers that provide some form of pension plan to some employees at the firm. Fewer—63.6 percent—are offered pension plans for themselves. An additional 12.3 percent of less-skilled workers could become eligible if they worked more hours or stayed on the job for additional months.

Paid leave receipt follows a similar pattern. Of all less-skilled workers, 87.4 percent work for employers that provide some amount of paid leave (including paid sick leave, paid vacation days, or paid personal days) to some employees at the firm. Of less-skilled recent hires, 71.1 percent have paid leave and an additional 10.7 percent could become eligible with more hours or months on the job.

An additional important question for workers with family care responsibilities is whether they can take time off when a child or family member is sick. Not all forms of paid leave allow for this type of absence. The Family and Medical Leave Act (FMLA) mandates unpaid leave for these situations for firms and workers that are covered. However, small firms and workers with limited job tenure are not necessarily covered. Of recently hired less-skilled workers, employers report that 53.4 percent can take paid leave to care for a sick child or family member and 97.1 percent can take unpaid leave. This level of unpaid leave is far above the coverage required under FMLA, suggesting that uncovered employers are allowing this kind of leave. However, the extent to which this type of leave is actually granted in a given situation (for example, in times of heavy workload) is unknown. Only 2.9 percent of recently hired less-skilled workers are in jobs where employers say they cannot take any time off for a sick child or family member.

Some employers with less-skilled jobs offer other benefits to these recently hired workers. A minority of less-skilled jobs offer assistance with child care, either paying for part of child care expenses (6.6 percent) or having child care on site (5.5 percent). About one-tenth of these jobs (11.7 percent) provide transportation or help pay for transportation. Many more have programs to help pay for education expenses (44.3 percent) or have an employee assistance plan (47.3 percent).<sup>20</sup>

The availability of benefits varies with employer characteristics. It is well documented that larger employers are more likely to offer health insurance and pension benefits and we also find this to be true. Of recently hired less-skilled workers, 81.3 percent in large firms were offered health insurance compared to 54.8 percent in smaller

---

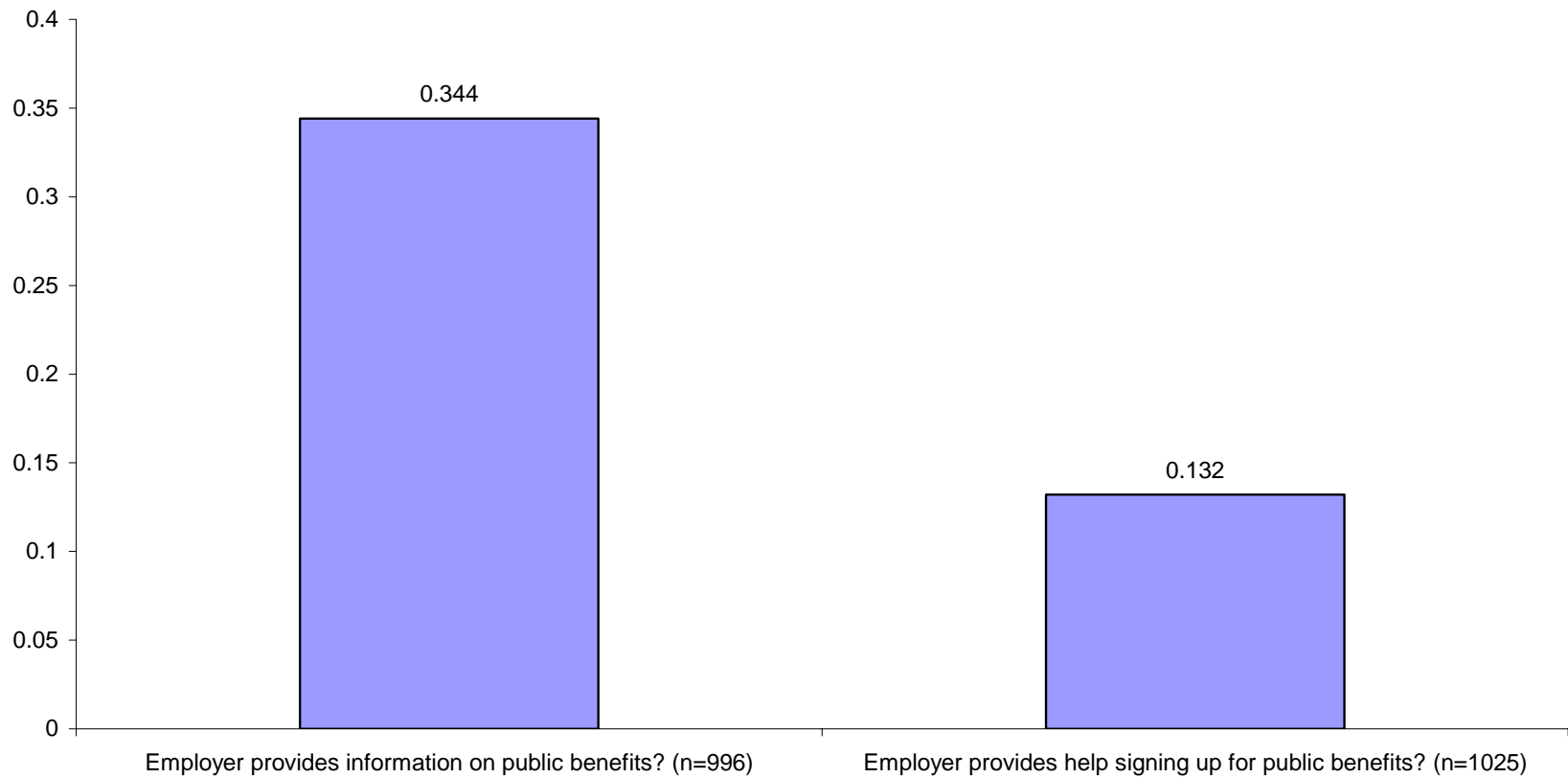
<sup>20</sup> Employee assistance plans usually provide employees with confidential help on problems including legal issues, counseling needs or other problems.

firms. Similar results hold for pensions, with 80.9 percent of recent less-skilled hires in large firms having a pension offer versus only 43.6 percent in smaller firms. In addition to these benefits, larger firms are more likely than smaller firms to offer paid leave to less-skilled workers (81.0 percent v. 59.6 percent) and allow workers paid time off to care for a sick child or family member (67.4 percent v. 37.1 percent). Large firms are also more likely to offer all of the other benefits discussed above.

There are few significant differences in benefits offered by lower- and higher-wage industries, but there are differences by location. Less-skilled jobs in lower-wage industries are less likely to have benefits, with a few exceptions. Workers in lower-wage industries are more likely to have paid time off and employee assistance plans. Employers in nonrural areas are also more likely to offer benefits to less-skilled workers, although the differences are less pronounced than by firm size.

In addition to offering benefits to workers directly, employers can also assist employees by helping them gain access to public benefits, such as the Earned Income Tax Credit, child care subsidies, public health insurance, or food stamps. A little more than a third of all recently filled less-skilled jobs, 34.4 percent, are with employers that provide information on these types of public benefits to their employees (Exhibit V.6). More than a tenth of these jobs (13.2 percent) are with employers who report they actually help their workers sign up for public benefits. Less-skilled workers in large firms and lower-wage industries are more likely to have employers that provide public benefit information (not shown).

**Exhibit V.6**  
**Employer Assistance with Public Benefits**



Source: Authors' tabulations of the Survey of Employers in the Low-Skill Labor Market.

## **Work Schedules**

The vast majority of recently hired less-skilled workers are employed full-time (Exhibit V.7). Only 3.9 percent are working less than 20 hours per week, and another 16.4 percent work between 20 and 34 hours per week. Almost a third of these workers work a shift other than a regular day shift. This includes 15.5 percent that work an evening shift, 4.7 percent that work a night shift, and 10.5 percent that work a rotating shift. Frequent overtime work is not common; working on the weekend is more so. Of less-skilled workers, 10.6 percent are frequently required to work overtime, with another 32.1 percent working overtime occasionally or sometimes. More than half of workers work on the weekend, 29.3 percent frequently and 24.3 percent occasionally or sometimes.

Work schedules vary across firm characteristics. Employees in less-skilled jobs in large firms and jobs in lower-wage industries are more likely to work full-time than their counterparts. Overtime work is less common in lower-wage industries while weekend work is substantially more common. Over half of employees in lower-wage industries are reported to frequently work weekends compared to only 15.5 percent of workers in other industries. These workers are also more likely to work the evening shift or rotating shifts and less likely to work a regular day shift. Finally, 26.9 percent of recently hired less-skilled workers are in jobs with a flexible time policy; that is, where employees can define their own daily or weekly work schedules. This percentage does not vary much by firm size or location.

Wages and benefits vary by work schedules of recently hired less-skilled workers (Exhibit V.8). Full-time positions pay more than part-time positions (\$13.31 v. under \$9



**Exhibit V.7**  
**Work Schedules of Employees Recently Hired into Noncollege Jobs by Employer Type**

	All (%)	Size (%)			Industry (%)			Location (%)	
		<100	100+		Lower- Wage	Higher- Wage		Nonrural	Rural
<b>Usual hours worked per week (n=1051)</b>									
<20	3.9	6.6	1.6	**	6.3	2.5	**	3.5	6.4
20-34	16.4	19.0	14.2		26.2	10.9	**	16.2	17.9
35+	79.6	74.4	84.2	**	67.5	86.6	**	80.3	75.7
<b>Usual work shift (n=1049)</b>									
Day shift	69.2	71.4	67.3		50.5	80.1	**	69.1	69.8
Evening shift	15.5	12.4	18.3		29.3	7.5	**	16.1	12.2
Night shift	4.7	3.2	6.1		4.0	5.2		4.8	4.4
Rotating shift	10.5	13.0	8.3		16.3	7.2	*	10.0	13.6
<b>Frequency of overtime work (n=1049)</b>									
Frequently	10.6	12.6	8.9		3.4	14.8	**	9.6	16.9 *
Occasionally or sometimes	32.1	33.1	31.2		24.9	36.3	*	32.3	30.9
Rarely	35.5	33.1	37.7		35.8	35.4		35.4	36.0
Never	21.7	21.2	22.2		35.9	13.6	**	22.6	16.2
<b>Frequency of weekend work (n=1051)</b>									
Frequently	29.3	31.4	27.5		53.0	15.6	**	28.6	33.8
Occasionally or sometimes	24.3	22.6	25.7		21.6	25.8		24.2	24.5
Rarely	26.0	20.9	30.6		14.5	32.7	**	26.8	21.6
Never	20.4	25.1	16.2	**	10.9	25.9	**	20.4	20.1
<b>Employer has flexible time scheduling policy<sup>a</sup> (n=1050)</b>									
	26.9	27.1	26.7		34.1	22.7		27.8	21.4

<sup>a</sup>Employees can define their own daily or weekly schedule.

\*\* p < .05 \* p < .10

Source: Authors' tabulations of the Survey of Employers in the Low-Skill Labor Market.

**Exhibit V.8**  
**Work Schedules of Workers Recently Hired into Noncollege Jobs by Mean Wage and Percent with Health Insurance Offer**

	Mean Wage		Employer Health Insurance Offer (%)	
<b>Usual hours worked per week</b> (n=947, 1046)				
<20	\$8.74		19.3	
20-34	\$8.69		30.3	
35+	\$13.31	**	79.5	**
<b>Usual work shift</b> (n=946, 1044)				
Day shift	\$12.58		76.1	
Evening shift	\$12.75		64.5	
Night shift	\$9.87	**	45.2	**
Rotating shift	\$9.89	**	37.3	**
<b>Frequency of overtime work</b> (n=950, 1045)				
Frequently	\$13.68		74.2	
Occasionally or sometimes	\$12.93		81.7	
Rarely	\$11.71		70.3	
Never	\$11.65		46.0	*
<b>Frequency of weekend work</b> (n=949, 1046)				
Frequently	\$11.76		60.9	
Occasionally or sometimes	\$11.47		72.4	
Rarely	\$14.24		80.9	**
Never	\$11.89		62.2	
<b>Employer has flexible time scheduling policy<sup>a</sup></b> (n=950, 1050)				
Yes	\$11.87		65.9	
No	\$12.44		70.1	

<sup>a</sup>Employees can define their own daily or weekly schedule.

\*\* p < .05 \* p < .10

Source: Authors' tabulations of the Survey of Employers in the Low-Skill Labor Market.

an hour) and are more likely to have an offer of health insurance (78.5 percent v. less than 30 percent). Those working night shifts and rotating shifts earn less than \$10 an hour and fewer than half have access to health insurance, while those working regular day shifts earn an average of \$12.58 an hour and three-quarters have access to health insurance. Although there are some differences in pay and benefits based on the frequency of overtime or weekend work, none are statistically significant.

## **Training**

When employers invest in their employees through provision of training, it usually reflects a job that either provides better pay or benefits currently or the potential for higher pay or promotion in the future. In addition, training may open up more job opportunities for workers in the future. The benefits of training depend on the type of training being offered. Training that is extremely specific to a job (e.g., how to work a specialized piece of machinery) may be less portable to other jobs than training that is more generalized (e.g., computer training on commonly used software). In addition, employers can provide job support services, such as a mentor or a job buddy. These are other employees (either same or higher level) who help to answer questions and support new (or sometimes established) employees to do their jobs more effectively.<sup>21</sup> While obtaining the details of training offered by employers was beyond the scope of our survey, we are able to report on employers' provision of several different categories of training and job supports (Exhibit V.9).

---

<sup>21</sup> A “mentor” is someone at a more senior level designated to provide career advice to the worker. A “buddy” is a worker in a similar position who can provide information on workplace practices and culture (e.g., how to request office supplies or how to operate the copier).

**Exhibit V.9**  
**Training Provided to Worker Recently Hired into Noncollege Job by Employer Type**

Training Types	All (%)	Size (%)		Industry (%)			Location (%)	
		<100	100+	Lower- Wage	Higher- Wage		Nonrural	Rural
Formal on-site training from instructor (n=1043)	51.2	49.7	52.5	70.7	39.6	**	52.4	44.1
Formal off-site training from instructor (n=1037)	20.5	18.7	22.0	24.9	17.9		21.7	13.0
Skill training (n=1029)	9.4	4.6	13.7	89.8	90.5		10.5	3.1
Mentor (n=1038)	60.9	60.9	61.0	56.4	63.5		61.4	58.0
Job buddy (n=1038)	48.7	49.0	48.5	45.7	50.5		47.9	53.7
Informal training (n=1045)	90.3	87.9	92.4	90.0	87.7		90.7	87.7
Regular feedback / appraisal (n=1036)	88.5	86.0	90.8	6.3	9.4		88.4	89.2
General work policies, orientation, safety (n=1029)	13.9	6.1	21.0	* 17.5	4.7		15.3	5.8
Other training / services (n=1024)	8.3	5.1	11.1	17.8	11.6		7.6	12.1

\*\* p < .05 \* p < .10

Source: Authors' tabulations of the Survey of Employers in the Low-Skill Labor Market.

A substantial percentage of less-skilled jobs include formal training (that is, from an instructor with a set curriculum), either on-site (51.2 percent) or off-site (20.5 percent). Formal training represents an investment by employers in their employees and is likely to translate into higher pay or future promotion possibilities. Specific skill training, reported for 9.4 percent of less-skilled jobs, is also an employer investment in the employee. Many less-skilled workers have job mentors (60.9 percent) or job buddies (48.7 percent). These activities presumably are meant to boost an employee's productivity and represent some level of employer investment, depending on the length of time the arrangement lasts.

Employers also report other types of training and support for less-skilled workers. Among less-skilled jobs, 90.3 percent include informal training, 88.5 percent include regular feedback or appraisal and 13.9 percent include training on general work policies, orientation or safety. An additional 8.3 percent reported some other form of training or services to employees. It is unclear the extent to which these types of training involve much employer investment or benefit to employees since virtually all jobs provide some amount of one of these latter types of training to the worker and they may not add much to workers' skills or productivity.

The extent to which training is offered varies slightly across employer characteristics. Although there is little difference in the incidence of formal training in less-skilled jobs in large and small firms, recently hired less-skilled workers in large firms are more likely to receive skill training than those in small firms (13.7 v. 4.6 percent). Differences in other types of training are smaller, with the exception that about

a fifth of jobs in large employers offer general work policies, orientation, or safety training compared to 6.1 percent of jobs in smaller firms.

The more unexpected result is that less-skilled jobs in lower-wage industries are more likely to offer formal training than jobs in other industries (70.7 percent v. 39.6 percent for formal on-site training) and far more likely to offer skill training (17.5 percent v. 4.7 percent). Given these jobs are in lower-wage industries we might expect that these employers would be less likely to invest in employees in this way. Employers in nonrural areas are more likely to provide formal or skill training than rural employers, but there is no uniform pattern for the other types of training or supports. Finally, there is little difference in the training opportunities offered to workers in recently filled less-skilled jobs by rural and nonrural employers.

Even though training should raise worker skills and be associated with better jobs, there is not much evidence that training opportunities are associated with better compensation. Recently filled less-skilled positions that offer on-site training from an instructor pay about the same as positions that do not (a little over \$12 an hour) and are equally likely to offer health insurance coverage (Exhibit V.10). And somewhat unexpectedly, jobs with employers that provide “job buddies” pay less, on average, than those that do not (\$11.42 v. \$13.19 an hour). On the other hand, positions that offer off-site training appear to pay more than those that do not (\$14.42 v. \$11.73 an hour), but the difference is not statistically significant and there is no difference in health insurance offers. Nevertheless, positions that offer skills training do pay significantly more than those that do not (\$17.47 v. \$11.70 an hour) as do positions that have general work policies and offer orientation and safety training (\$15.39 v. \$11.72 an hour). Although

**Exhibit V.10**  
**Training Provided to Worker Recently Hired into Noncollege Job by Mean**  
**Wage and Percent with Health Insurance Offer**

<b>Training Types</b>	<b><u>Wage</u></b>	<b><u>Health Insurance (%)</u></b>
Formal on-site training from instructor (n=941, 1039)		
Yes	\$12.07	69.2
No	\$12.45	68.4
Formal off-site training from instructor (n=937, 1033)		
Yes	\$14.42	69.6
No	\$11.73	69.2
Skill training (n=933, 1026)		
Yes	\$17.47**	91.4**
No	\$11.70	65.8
Mentor (n=937, 1035)		
Yes	\$11.88	69.7
No	\$13.00	68.8
Job buddy (n=938, 1034)		
Yes	\$11.42*	65.1
No	\$13.19	73.1
Informal training (n=943, 1041)		
Yes	\$12.32	69.2
No	\$12.26	67.0
Regular feedback / appraisal (n=934, 1032)		
Yes	\$12.26	69.4
No	\$12.85	62.5
General work policies, orientation, safety (n=933, 1026)		
Yes	\$15.39*	87.1**
No	\$11.72	65.1
Other training / services (n=930, 1021)		
Yes	\$12.00	55.5
No	\$12.29	69.2

\*\* p < .05 \* p < .10

Source: Authors' tabulations of the Survey of Employers in the Low-Skill Labor Market.

these jobs also have a higher incidence of health insurance, the differences in health insurance availability are not statistically significant.

The compensation in terms of wages and benefits associated with recently filled noncollege jobs gives some indication of how well the worker and the job are matched up and how workers fare in the jobs they obtain. In the next section, we take a closer look at the job performance of workers in recently filled noncollege jobs.



## **VI. Job Performance and Advancement**

Understanding the demand side of the labor market requires gaining insight into employers' perspectives on the performance of workers in less-skilled jobs. In this section, we examine two aspects of worker performance. First we consider whether employers have had any difficulties with their most recently hired less-skilled worker and what types of problems are most prevalent. Then we consider the prospects for advancement from recently filled less-skilled jobs as well as actual promotions and raises less-skilled workers have received.

### **Problems on the Job**

A concern in the low-wage labor market is that workers may have myriad barriers—from physical health problems to transportation problems and child care issues—that they must overcome to be able to hold down jobs and that these barriers may contribute to problems on the job. Reported high job turnover in some low-skill jobs (Holzer and Martinson 2005) and high levels of personal challenges among disadvantaged groups suggest that problems on the job may be significant. Our survey asks employers about problems they have had with their most recently hired less-skilled worker. Overall, we find that the incidence of problems reported by employers is low.

Exhibit VI.1 shows that only 15.1 percent of recently hired less-skilled workers are reported by employers to have any problems on the job. The most prevalent problem is tardiness, reportedly occurring for 8.7 percent of these workers. Fewer than 5 percent of workers have each of the following problems: poor attitude toward work; lacking basic

**Exhibit VI.1**  
**Problems on the Job by Employer Type**

	All	Size (%)			Industry (%)			Location (%)	
	(%)	<100	100+		Lower- Wage	Higher- Wage		Nonrural	Rural
Had following problems <sup>a</sup>									
Tardiness? (n=996)	8.7	9.8	7.7		6.2	10.2		7.3	16.9
Attitude towards work (n=994)	4.4	5.8	2.9		3.9	4.6		4.4	3.9
Basic math, verbal, reading skills (n=986)	3.3	5.4	1.3	**	2.6	3.7		3.4	2.8
Other job related skills (n=993)	3.8	5.5	2.1	**	2.0	4.8	**	3.8	3.7
Substance abuse (n=975)	1.7	2.9	0.5		0.6	2.3		1.8	1.0
Relationships with coworkers (n=991)	3.5	4.3	2.8		2.2	4.3		3.7	2.3
Relationships with supervisors (n=995)	2.0	2.6	1.4		1.4	2.4		2.3	0.3
Relationships with customers / clients (n=996)	1.0	1.3	0.7		1.3	0.9		1.1	0.6
Had any problems at all (n=1010)	15.1	19.8	10.6	**	10.4	17.7	**	13.6	23.4
									*

<sup>a</sup> Excludes 33 employers whose most recent hire was the day of the survey.

\*\* p < .05 \* p < .10

Source: Authors' tabulations of the Survey of Employers in the Low-Skill Labor Market.

math, verbal, reading skills or other job-related skills; substance abuse issues; or difficulties interacting with coworkers, supervisors, or customers and clients.

For the most part, there are no large differences in the incidence of specific problems across firm sizes, industry types, and employer location. However, combining all problems, small employers, employers in higher-wage industries, and rural employers are more likely to report problems with less-skilled workers.<sup>22</sup>

### **Prospects for Advancement**

One strategy for improving the well-being of those entering into low-wage jobs is promoting job advancement. One type of advancement we investigate here is promotion with the current employer. We find that many employers report that workers in less-skilled jobs have good prospects to advance. According to employers, more than two-thirds of recently hired less-skilled workers hold jobs where there is a good (38.9 percent) to excellent (30.8 percent) chance of promotion for a worker that performs well (Exhibit VI.2). Almost half of promotions (48.6 percent) would typically come within a year. The down-side is that 7.1 percent of these jobs have no chance of promotion and another 11.4 percent have only a rare chance for promotion.

The chances for a promotion are somewhat higher in larger firms than in smaller ones. Only about one-tenth of jobs in large firms rarely or never promote from that

---

<sup>22</sup> We also focus specifically on the most common problem, tardiness, and examine the reasons for tardiness, although the sample size is small (N=101). Overall, the most common reason for tardiness is “problems at home,” cited for 40.8 percent of workers. This is closely followed by “physical health problems” at 35.2 percent. Transportation problems are the reason for tardiness among 27.4 percent of habitually tardy less-skilled workers, and child care problems are the source of tardiness for 21.9 percent of these workers. Mental health and depression and court appearance are related to tardiness 15.2 and 13.9 percent of the time. Finally, domestic violence is reported to be the cause of tardiness 3.4 percent of the time.

**Exhibit VI.2**  
**Chance of and Time to Promotions by Employer Type**

	All (%)	Size (%)			Industry (%)		Location (%)	
		<100	100+		Lower- Wage	Higher- Wage	Nonrural	Rural
<b>Typical chance of promotion for a worker in this job if performs well (n=1052)</b>								
Excellent	30.8	33.6	28.2		28.7	32.0	30.7	31.3
Good	38.9	28.1	48.4	**	46.2	34.7	39.9	32.9
Fair	11.9	11.2	12.5		10.1	12.9	11.5	14.3
Rarely promote from position	11.4	15.7	7.6	**	7.8	13.5	**	11.1
No promotions from position	7.1	11.4	3.3	**	7.3	7.0		6.9
								8.3
<b>Typical time to promotion for a worker in this job (n=1060)</b>								
<6 months	14.0	12.9	14.9		18.0	11.7	13.7	15.8
6-12 months	34.6	38.9	30.9		36.4	33.6	33.1	43.5 *
More than 12 months	35.3	27.7	41.9	*	32.4	36.9	37.6	21.5 **
No promotions from position	7.1	11.4	3.3	**	7.2	7.0	6.9	8.2
DK/RF	9.1	9.2	9.0		5.9	10.9	**	8.8
								11.0

\*\* p < .05 \* p < .10

Source: Authors' tabulations of the Survey of Employers in the Low-Skill Labor Market.

position compared to over a quarter of jobs in small firms. There are limited differences in promotion possibilities across lower-wage and higher-wage industries and location.

For less-skilled workers, the frequency of actual promotions and raises match employers' reports of these jobs' advancement opportunities. About one-fifth of recently hired less-skilled workers have already been promoted and one-fifth have received raises (Exhibit VI.3). The median wage increase for this group was \$1 over the median starting wage of \$9.50 (not shown). Taken together, more than a quarter of workers (27 percent) have received either a promotion or a raise. These numbers are relatively high given that our sample focuses on the most recently hired worker and, as such, many of the workers have not been on the job very long. When we separate workers into groups by how long they have held the current job, we see that only one-fifth of these workers have been on the job for six months or more. Of this group, 55.2 percent have been promoted and 64.1 percent have received a raise. These figures match closely employer reports of promotion possibilities for these jobs. Of workers who have been on the job for 6 months or more, 54.9 are in jobs with good or excellent promotion possibilities and only 34.0 percent typically promote workers with less than 12 months of tenure. However, we should note that over 30 percent of workers with at least 6 months on the job are in jobs that rarely or never promote. These results suggest that a large proportion of workers in this tenure group who are in jobs with promotion possibilities have been promoted.

### **Entry-Level and Next-Level Jobs**

We have already shown how the requirements of jobs translate into wages: jobs requiring specific skills and prior experience generally pay higher wages. Yet many

**Exhibit VI.3**  
**Raises and Promotions by Job Tenure**

	All (%)	Job Tenure (in months)			
		Less than 1 (%)	1 to 5 (%)	6 and up (%)	
<b>Percent with given tenure</b> (n=1041)	100.0	26.2	54.6	19.2	
<b>Typical chance of promotion for a worker in this job if performs well</b> (n=1034)					
Excellent	30.6	35.2	28.1	31.2	
Good	39.3	39.3	44.7	23.7	**
Fair	11.8	11.4	11.3	13.7	
Rarely promote from position	11.4	10.8	8.4	20.7	*
No promotions from position	7.1	3.4	7.5	10.8	**
<b>Typical time to promotion for a worker in this job</b> (n=1041)					
<6 months	14.2	13.7	15.2	11.7	
6-12 months	34.8	47.4	33.1	22.3	**
More than 12 months	35.5	26.3	38.0	41.0	*
No promotions from position	7.0	3.4	7.5	10.7	**
DK/RF	8.5	9.3	6.1	14.2	
<b>Has Recently Hired Worker Ever Received a Raise?</b> <sup>a</sup> (n=1003)	19.5	5.8	9.8	64.1	**
<b>Has Recently Hired Worker Ever Been Promoted?</b> <sup>a</sup> (n=994)	17.2	3.1	10.0	55.2	**

<sup>a</sup> Excludes 33 employers whose most recent hire was the day of survey.

\*\* p < .05 \* p < .10

Source: Authors' tabulations of the Survey of Employers in the Low-Skill Labor Market.

workers entering the labor market do not have either specific skills or prior experience. In addition, some do not even have a high school education or GED. In section IV, we defined a set of “entry-level” jobs with minimal requirements; jobs for which employers report that specific skills, prior experience, or a high school education are not required or not extremely important. In this section, we examine this roughly thirty percent of all less-skilled jobs to understand the characteristics of the jobs available to workers with the least prior skills and experience. In addition, we compare these jobs to the rest of less-skilled jobs that have higher requirements. This comparison provides a sense of what entry-level workers stand to gain by increasing their skills and experience or attaining a GED, even if they do not gain education beyond a high school degree.

As shown earlier, entry-level jobs pay lower hourly wages on average than jobs with higher requirements, \$9.25 versus \$13.85 (Exhibit VI.4). These jobs are more likely to be with small employers, lower-wage industries, and in rural areas than higher-requirement jobs, although the difference by industry is not statistically significant.

The three most common search methods used by employers to fill entry-level jobs are referrals, applications or walk-ins (without referrals), and advertisements. Each of these is used for about 30 percent of these jobs. Employers use different methods to fill their entry-level noncollege jobs than to hire for jobs with higher requirement levels, and this may be useful when trying to devise strategies to help workers move into next-level jobs. For example, employers are less likely to use private or temporary agencies or advertisements to hire for entry-level jobs. Both of these methods likely incur costs for the employer and are less worth the investment for lower paying jobs. Indeed, employers report that they have an easier time filling entry-level jobs than higher requirement jobs.

**Exhibit VI.4**  
**Characteristics of Recently Filled Noncollege Jobs by Requirements**

	Entry-Level Jobs <sup>a</sup>	Jobs with Higher Requirements	
<b>Hourly Wage</b> (n=949)			
Mean	\$9.25	\$13.85	**
25th percentile	\$7.15	\$9.75	
Median	\$8.50	\$12.75	
75th percentile	\$10.64	\$17.00	
90th percentile	\$12.00	\$20.63	
<b>Size</b> (n=1055)			
Small	56.4	42.2	**
Large	43.6	57.8	
<b>Industry</b> (n=1055)			
Lower-wage	42.5	33.7	
Higher-Wage	57.5	66.3	
<b>Location</b> (n=1055)			
Nonrural area	82.0	87.4	*
Rural area	18.0	12.6	
<b>Search Method</b> (n=1026)			
Public Agency	3.5	5.1	
Private or Temporary Agency	2.5	7.6	**
Referral	32.0	18.8	**
Advertisement	29.6	53.0	**
Application/walk-in without referral	30.5	12.4	**
Other	1.8	3.2	
<b>Level of difficulty finding workers to hire</b> (n=1034)			
Easy	29.9	17.1	**
Somewhat difficult	50.4	63.1	*
Very difficult	19.7	19.9	

\*\* p < .05 \* p < .10

<sup>a</sup> Entry-level jobs are defined as those where HS diploma/GED, prior job-related experience, and previous training or skill certification are only somewhat or not very important for the job. This includes 31.8 percent of all less-skilled jobs. Jobs with higher-level requirements include all other noncollege jobs.

Source: Authors' tabulations of the Survey of Employers in the Low-Skill Labor Market.



For almost 30 percent of entry-level jobs, the employer reports it is easy to find workers compared to only 17.1 percent of higher requirement jobs. This suggests a greater supply of less-skilled workers and potentially more competition for jobs. However, this is not universally true, because there are still almost 20 percent of entry-level jobs for which employers report it is very difficult to find workers to hire.

The characteristics of entry-level jobs, in addition to wages, are generally less desirable than higher requirement jobs (Exhibit VI.5). They are less likely to be full-time jobs (64.7 percent v. 86.6 percent) and less likely to have day shift hours (58.5 percent v. 74.3 percent) than next-level jobs. Many more of these jobs require rotating shifts, 19.3 percent v. 6.4 percent. Many more entry-level jobs do not provide health insurance and pension benefits as well. Only 45.1 percent of workers recently hired into entry-level jobs were offered health insurance or an HMO. This compares to 80.2 percent of recently hired workers into jobs with higher requirements. However, about another quarter of workers in entry-level jobs could potentially become eligible for this benefit if they work greater hours or stay on the job. The story for pension benefits is similar: 42.3 percent of recently hired entry-level workers are offered pensions compared to 73.5 percent of workers recently hired into jobs with higher requirements. Paid leave for workers in entry-level jobs is also less common than for other jobs, 55.0 percent v. 78.5 percent. For less than a third of entry-level jobs do employers report that a worker can take paid time off to care for a sick child or family member. This compares to 64.9 percent of workers in higher-requirement jobs.

Overall, these findings suggest that entry-level jobs whose requirements are most compatible with workers who have minimal skills, education, and experience are much

**Exhibit VI.5**  
**Job Characteristics of Recently Filled Noncollege Jobs by Requirements**

	Entry-Level Jobs <sup>a</sup> (%)	Jobs with Higher Requirements (%)	
<b>Usual hours worked per week (n=1048)</b>			
<20	6.7	2.5	**
20-34	28.6	10.9	**
35+	64.7	86.6	**
<b>Usual work shift (n=1046)</b>			
Day shift	58.5	74.3	**
Evening shift	15.1	15.8	
Night shift	7.1	3.5	
Rotating shift	19.3	6.4	**
<b>Health Insurance or HMO</b>			
Employer offers to some employees at this firm (n=1046)	79.0	92.0	**
Worker in recently filled job was offered (n=1050)	45.1	80.2	**
Worker in recently filled job could become eligible with more hours or tenure (n=1044)	26.3	9.0	**
<b>Pension or 401K</b>			
Employer offers to some employees at this firm (n=1041)	69.2	84.5	**
Worker in recently filled job was offered (n=1046)	42.3	73.5	**
Worker in recently filled job could become eligible with more hours or tenure (n=1040)	20.9	8.3	**
<b>Paid Leave<sup>b</sup></b>			
Employer provides to some employees at this firm (n=1041)	79.1	91.4	**
Worker in recently filled job has this benefit (n=1044)	55.0	78.5	**
Worker in recently filled job could become eligible with more hours or tenure (n=1045)	16.7	7.9	*
<b>Recently hired worker can take time off to care for sick child/family member (n=1006)</b>			
Paid time off	31.2	64.9	**
Unpaid time off	64.9	32.7	**
Cannot take time off for this	3.9	2.4	

\*\* p < .05 \* p < .10

<sup>a</sup> Entry-level jobs are defined as those where HS diploma/GED, prior job-related experience, and previous training or skill certification are only somewhat or not very important for the job. This includes 31.8 percent of all less-skilled jobs. Jobs with higher-level requirements include all other noncollege jobs.

<sup>b</sup> Paid leave includes sick leave, paid vacation days, or paid personal days.

Source: Authors' tabulations of the Survey of Employers in the Low-Skill Labor Market.

less desirable than other less-skilled jobs in terms of wages, benefits and hours. Even though this is not a surprising finding in general, the difference in characteristics among less-skilled jobs is striking. Although there is a great deal of evidence that higher levels of educational attainment are linked to better jobs, these results suggest that improved skill levels and gaining additional experience can potentially improve workers' job prospects considerably.

## **VII. Important Factors in Attaining Better Jobs**

In this section, we examine which of the many characteristics of employers and jobs in the noncollege labor market are most strongly associated with “better” jobs, that is, jobs with higher wages and benefits or jobs that represent a better chance for advancement in the labor market. Our findings in earlier sections have not taken multiple factors into account at once, and therefore do not allow for comparisons of importance across these factors. To gain a more complete understanding, we estimate a series of multivariate regression models.

We first focus on which job and employer characteristics are associated with higher wages. We then examine which of these characteristics are associated with more successful job placements—what we refer to as “next-level” jobs. We define these jobs in two ways: (1) jobs that pay higher-than-average wages and offer health insurance and paid leave and (2) jobs with more stringent requirements than entry-level jobs. We then focus on entry-level jobs and distinguish between those that offer an excellent chance for promotion and those that do not.

### **Wages**

Understanding what job and employer factors are associated with higher wage rates is important for those seeking jobs and for agencies assisting workers in that search. In this section, we regress the natural log of hourly wages on the different factors that account for wage variation across workers and jobs. To simplify our examination, we

organize these factors into four groups. We then run four different regression models adding an additional group of factors in each model.<sup>23</sup>

First, we consider how wages depend on the requirements of the job. Job requirements include whether having a high school degree, prior job-specific experience, and specific skills training or certification are very important for the job and whether the job requires daily reading, writing, speaking with customers, arithmetic computations, use of a computer, filling out forms, group work, and monitoring instruments. Next, we consider how worker characteristics (sex, race/ethnicity, immigrant status, age, education, and training) influence pay. Although we are most interested in demand-side factors, the wage in a given job reflects the match between workers' characteristics and the characteristics of the job. Therefore, worker characteristics may have an effect on wages over and above job requirements. For example, a worker with greater education than is required for the job may enjoy a wage bonus for this education.

Our third set of factors are employer characteristics, which can tell us if different types of employers reward skills differently, controlling for job requirements and worker characteristics. Employer characteristics include firm size, location, union coverage, nonprofit status, and industry. Finally, our fourth group of factors represents information on the characteristics of the job including employer policies. The job characteristics we include are part-time status, provision of formal training, opportunities for promotion,

---

<sup>23</sup> The regressions are restricted to just those observations for which we have valid hourly wages (n=951). To preserve sample size, if data are missing for explanatory variables, we retain the observation and create a missing value indicator for the missing information. Although some of the missing data indicator variables are statistically significant, our findings on the key explanatory variables are quite similar to those obtained using only observations with no missing data. We do not present estimated coefficients for these indicator variables in the Exhibit. All regressions are run using worker/job weights and are adjusted for sample clustering.

flex-time policies and recruitment method (use of a public, private, or temporary agency, use of a personal referral, or use of advertisements).

Results for the series of regressions appear in Exhibit VII.1. We discuss the results for our fourth model with all factors included, referring to the separate group model results where appropriate.

Specific job requirements are associated with higher-wage jobs. Jobs for which past job-specific experience and skills training are extremely important pay significantly higher than those with less demanding requirements. Jobs where past experience is extremely important pay about 12 percent more than other jobs and jobs that demand training pay about 15 percent more than other jobs. After controlling for employer characteristics, jobs for which a high school degree is extremely important do not pay significantly more than other jobs. This suggests that high school is a more common requirement among certain types of higher-paying employers and that once sorting across employer types is taken into account, there is no significant wage premium for jobs in which a high school degree is extremely important.

The specific task requirements of jobs also influence wage rates for recently hired workers but in some surprising ways. Jobs that require certain cognitive skills pay significantly higher wages than jobs that do not: jobs requiring daily writing pay 8 percent more, filling out forms daily pay 7 percent more, regular use of a computer pay about 14 percent more and monitoring instruments pay about 6 percent more. Jobs requiring reading, speaking, or group work are not associated with higher wages and jobs that involve regular use of arithmetic pay 6 percent *less* than jobs without this requirement. Certain tasks may have zero or even negative associations with wages

**Exhibit VII.1**  
**Regression of Wage Rates on Job Requirements, Worker Characteristics, and Firm Characteristics**

	Model 1		Model 2		Model 3		Model 4	
Variable	Coefficient	Std Error	Coefficient	Std Error	Coefficient	Std Error	Coefficient	Std Error
High school education very important	0.122**	0.047	0.086**	0.043	0.041	0.037	0.027	0.037
Experience very important	0.267**	0.050	0.186**	0.044	0.127**	0.041	0.120**	0.039
Training very important	0.138**	0.058	0.104**	0.050	0.150**	0.045	0.153**	0.042
Job requires speaking daily	-0.094**	0.040	-0.059*	0.034	-0.031	0.034	-0.025	0.036
Job requires group work daily	0.050	0.040	0.032	0.037	0.001	0.036	-0.006	0.037
Job requires reading daily	0.001	0.043	-0.063	0.043	-0.041	0.037	-0.044	0.037
Job requires writing daily	0.061	0.060	0.107**	0.043	0.098**	0.038	0.082**	0.037
Job requires arithmetic daily	-0.096**	0.043	-0.076**	0.037	-0.071**	0.035	-0.061*	0.035
Job requires filling out forms daily	0.071	0.051	0.072	0.046	0.074**	0.037	0.069*	0.039
Job requires using a computer daily	0.129**	0.051	0.149**	0.042	0.137**	0.039	0.138**	0.039
Job requires monitoring instruments daily	0.122**	0.045	0.045	0.035	0.061*	0.032	0.062*	0.033
Employee is male			0.195**	0.036	0.158**	0.035	0.141**	0.034
Employee is black non-Hispanic			-0.128**	0.041	-0.137**	0.038	-0.122**	0.039
Employee is Hispanic			-0.026	0.046	-0.043	0.044	-0.042	0.043
Employee is an immigrant			-0.066	0.047	-0.055	0.045	-0.059	0.046
Employee's age less than 25			-0.274**	0.056	-0.251**	0.051	-0.251**	0.049
Employee's age 25 to 44			-0.078	0.055	-0.102**	0.051	-0.108**	0.050
Employee has high school degree or GED			0.048	0.076	0.038	0.060	0.032	0.055
Employee has some college			0.012	0.091	0.047	0.073	0.044	0.070
Employee has college degree			0.209**	0.105	0.219**	0.083	0.212**	0.079
Employee has special training			0.062	0.038	0.062*	0.035	0.051	0.034
Small firm					-0.059*	0.034	-0.056*	0.032

(Table Continues)

**Exhibit VII.1 (Continued)**  
**Regression of Wage Rates on Job Requirements, Worker Characteristics, and Firm Characteristics**

Variable	Model 1		Model 2		Model 3		Model 4	
	Coefficient	Std Error	Coefficient	Std Error	Coefficient	Std Error	Coefficient	Std Error
Rural firm					-0.128**	0.027	-0.121**	0.028
Nonprofit firm					-0.095**	0.037	-0.083**	0.037
Nonunion firm					-0.141**	0.049	-0.129**	0.046
Agriculture, forestry, fishing, or mineral					0.145*	0.082	0.127	0.090
Construction, extraction, or maintenance					0.156**	0.072	0.146**	0.067
Transportation, communication, or utilities					-0.018	0.062	0.002	0.061
Wholesale trade					-0.060	0.067	-0.056	0.066
Retail trade					-0.206**	0.064	-0.170**	0.066
FIRE industry					-0.065	0.062	-0.064	0.063
Health services					-0.077	0.059	-0.057	0.058
Other services					-0.077	0.063	-0.048	0.060
Unidentified or don't know industry					-0.181**	0.079	-0.176**	0.087
Employer provides formal training							0.005	0.028
Employee works less than 35 hours a week							-0.106**	0.034
Employer has flexible time policy							0.014	0.036
Employee found through public, private, or temporary agency							0.016	0.054
Employee found through referral							0.057	0.043
Employee found through advertisement							0.024	0.039
Employee has excellent chance of promotion							0.040	0.031
Constant	2.107**	0.050	2.176**	0.087	2.478**	0.111	2.464**	0.108
Number of observations	951		951		951		951	
Mean of log of hourly wage	\$12.30		\$12.30		\$12.30		\$12.30	

\*\* p < .05 \* p < .10

Note: Missing data flags included but not shown, regressions weighted, and standard errors adjusted for clustering.

Source: Authors' tabulations of the Survey of Employers in the Low-Skill Labor Market.



because the skills required are in wide supply—for example, many people may be able to perform a certain task such as speaking to customers; thus employers do not need to pay a wage premium for such workers.

The associations of these tasks with wages remains fairly constant regardless of other factors controlled for, with some borderline changes in significance. It is noteworthy that skills such as writing and using computers are strongly associated with higher pay even after controlling for worker, employer, and other job characteristics.

We next assess the connections between worker characteristics and wages. While the labor supply literature already provides a great deal of information on the connection between worker characteristics and wages, we are able to examine the influence of these characteristics after controlling for specific job requirements, employer characteristics, and job characteristics. We find that most of the commonly found results remain true even after taking into account these additional factors; results are quite robust across all of our models.

Of individuals recently hired into noncollege jobs, men earn 14 percent more than women, black non-Hispanics earn about 12 percent less than white non-Hispanics, those under the age of 25 earn 25 percent less than those ages 45 and up and those between the ages of 25 and 44 earn about 11 percent less. In addition, those with a college degree earn about 21 percent more than those without a high school degree, but there is no significant difference between those with less than a high school degree, high school graduates, and those who received some post-secondary education. Finally, those with specific skills training do not earn significantly more than those without it.

We also find that certain types of employers pay higher wages even after controlling for specific job requirements, job characteristics, and worker characteristics. Recently hired workers employed by small firms and by firms in rural areas earn 6 and 12 percent less than their counterparts, respectively, even when other factors are taken into account. Similarly, those working for nonprofit employers and for employers without collective bargaining agreements (non-union employers) earn 8 and 13 percent less, respectively, than other recently hired workers. There are also some significant wage differences by industry, even for jobs with similar requirements and characteristics. Compared to jobs in manufacturing, recently hired less-skilled workers employed in retail trade earn 17 percent less and those in construction earn 15 percent more. Noncollege jobs in service industries do not pay significantly different wages than those in manufacturing.

Finally we consider job attributes including how the employer identified their most recently hired noncollege worker. Among the job attributes we include, the only significant factor is hours worked. Recently filled noncollege jobs that involve less than 35 hours a week of work (part-time work) pay almost 11 percent less than full-time jobs. Noncollege jobs at employers that provide formal training, offer flexible time policies, or have an excellent chance of promotion carry neither a wage premium nor penalty, controlling for all other factors. We also find no significant differences in wages based on the method employers use to identify the workers they most recently hired into noncollege jobs.

Our findings show that jobs requiring past experience and specific skill sets tend to offer better wages. The specific skills required by jobs that are associated with higher

wages and may be most advantageous to workers include writing skills as well as the ability to use a computer. Even after taking into account job requirements and employer characteristics, there remains variation in wages across worker characteristics. Older workers and those with college degrees earn more. In addition, sex and race differentials persist.

Employer type also influences wages, with smaller and rural employers paying less. Also, there is differential pay across industries. Further, noncollege jobs in unionized firms pay more than those in non-unionized firms. Lastly, how a worker was identified and whether training is offered are not significantly correlated with the wages earned by workers recently hired into noncollege jobs. This does not mean that there is no role for workforce intermediaries. Rather, after an appropriate worker-job match has occurred, as is the case in our sample of recently filled noncollege jobs, there is no residual wage benefit from having used any particular mechanism to facilitate that match.

### **Next-level Jobs**

Wages are only one metric for measuring successful placements in the low-wage labor market. From the employee perspective, most would agree that jobs with higher wages and access to benefits like health insurance and paid leave are better than those with lower wages and lacking benefits. However, for a mother leaving welfare or a young ex-offender with little prior work experience, any job placement may be considered a success. In this section, we want to distinguish between entry-level jobs and what we call here “next-level” jobs. We characterize “next-level” jobs in two different ways, as described earlier. For each measure of a next-level job, we assess the correlates

of being in such a job in a full-scale multivariate model based on model 4 from the wage regressions discussed above. All models assessing next-level jobs are estimated using logit models. Regression results appear in Exhibit VII.2.<sup>24</sup>

High wage/benefit jobs. Column 1 of Exhibit VII.2 shows regression results for the correlates of jobs that offer higher wages and benefits. The specific definition we use is workers earning more than \$10 an hour who have an offer of health insurance and have paid time off.<sup>25</sup> About 44 percent of workers in recently filled noncollege jobs have achieved next-level jobs by these criteria, either because they were hired into the job or because they have advanced with their employer, gaining benefits eligibility and/or receiving raises.<sup>26</sup> The regressors in this model are identical to those in model 4 of the wage regressions.<sup>27</sup>

Prior education and experience and certain specific skills are associated with landing a next-level job. Recently filled noncollege jobs for which a high school education is very important are about 16 percentage points more likely to be high wage/benefit jobs, and those for which experience is very important are nearly 30 percentage points more likely to be high wage/benefit jobs than are jobs for which these

---

<sup>24</sup> We tailor our models for each definition because in some cases, explanatory variables for wages serve as markers for next-level jobs (e.g., having an excellent chance of promotion is an explanatory variable in the wage equation but it serves as a dependent variable when next-level jobs are defined based on promotion opportunities).

<sup>25</sup> We do not have information on whether or not the worker takes up the offer of health insurance, which likely depends on other factors such as total family income and family structure. What we emphasize here is attaining a job that offers health insurance.

<sup>26</sup> We do not include workers who could be eligible for health insurance or paid leave if they worked more months or hours because it is not clear what the actual chances are of this happening and the extent to which it is under the worker's control.

<sup>27</sup> The sample is estimated on all observations with valid data on the dependent variable. Flag variables are included in the regression to account for cases in which values for the explanatory variables are missing. In some cases, the flag variables are perfectly correlated with the outcome; in these cases, the observations are dropped from the regression.

**Exhibit VII.2**  
**Regression of Wage Rates on Job Requirements, Worker Characteristics, and Firm Characteristics**

Variable	Success		HS, Experience, or Training Very Important		Excellent Chance of Promotion	
	Coefficient t	Std Error	Coefficient	Std Error	Coefficient	Std Error
High school education very important	0.635*	0.342				
Experience very important	1.215**	0.334				
Training very important	0.126	0.405				
Job requires speaking daily	-0.108	0.378	0.044	0.272		
Job requires group work daily	0.308	0.383	-0.551*	0.313		
Job requires reading daily	-0.888*	0.480	0.545*	0.321		
Job requires writing daily	0.729**	0.318	0.841**	0.286		
Job requires arithmetic daily	0.064	0.302	-0.734**	0.271		
Job requires filling out forms daily	1.084**	0.329	0.478	0.303		
Job requires using a computer daily	1.017**	0.355	0.643**	0.294		
Job requires monitoring instruments daily	-0.396	0.320	-0.070	0.260		
Employee is male	1.328**	0.373	-0.268	0.291	0.203	0.401
Employee is black non-Hispanic	0.208	0.422	-0.694*	0.408	0.130	0.570
Employee is Hispanic	-0.221	0.425	-0.106	0.323	0.269	0.542
Employee is an immigrant	-0.811	0.739	-0.363	0.445	0.115	0.685
Employee's age less than 25	-1.804**	0.471	-1.147**	0.387	1.485*	0.803
Employee's age 25 to 44	-0.479	0.423	-0.323	0.379	0.932	0.806
Employee has high school degree or GED	2.282**	0.747	1.988**	0.558	0.044	0.470
Employee has some college	2.633**	0.891	2.984**	0.621	-0.100	0.577
Employee has college degree	2.837**	0.929	2.116**	0.771	0.688	0.985
Employee has special training	-0.176	0.319	0.752**	0.284	0.394	0.434
Small firm	-1.243**	0.317	-0.447*	0.249	-0.164	0.392
Rural firm	-0.935**	0.393	-0.172	0.303	-0.278	0.388
Nonprofit firm	-0.119	0.424	0.172	0.342	-1.467**	0.452
Nonunion firm	-0.223	0.405	0.128	0.407	-0.478	0.637

(Table Continues)

**Exhibit VII.2 (Continued)**  
**Regression of Wage Rates on Job Requirements, Worker Characteristics, and Firm Characteristics**

Variable	Success		HS, Experience, or Training Very Important		Excellent Chance of Promotion	
	Coefficient	Std Error	Coefficient	Std Error	Coefficient	Std Error
Agriculture, forestry, fishing, or mineral	0.335	0.928	-1.223	0.927	3.560**	1.277
Construction, extraction, or maintenance	-1.498**	0.626	0.630	0.555	2.248**	0.749
Transportation, communication, or utilities	-0.857	0.753	0.367	0.711	0.400	1.113
Wholesale trade	-0.390	0.629	-0.134	0.494	1.192	0.828
Retail trade	-1.329**	0.529	0.658	0.489	1.868**	0.665
FIRE industry	-0.055	0.712	-0.838*	0.505	2.448**	0.920
Health services	-0.940	0.642	0.283	0.496	1.906**	0.715
Other services	-0.764	0.561	-0.033	0.424	1.934**	0.644
Unidentified or don't know industry	0.086	0.897	0.159	1.183	-0.509	1.625
Employer provides formal training	0.435	0.307	0.085	0.251	0.623*	0.358
Employee works less than 35 hours a week	-2.301**	0.526	-1.080**	0.315	0.009	0.407
Employer has flexible time policy	0.461	0.342	0.020	0.282	0.001	0.392
Employee found through public, private, or temporary agency	0.182	0.541	1.051*	0.555	-0.022	0.882
Employee found through referral	-0.969**	0.418	0.219	0.325	0.451	0.416
Employee found through advertisement	-0.386	0.384	0.759**	0.323	0.172	0.422
Employee has excellent chance of promotion	-0.141	0.304	0.222	0.268		
Constant	-2.050*	1.117	-1.332	0.815	-3.923**	1.372
Number of observations	944		1055		396	
Mean of dependent variable	0.437		0.682		0.358	

\*\* p < .05 \* p < .10

Note: Missing data flags included but not shown, regressions weighted, and standard errors adjusted for clustering.

Source: Authors' tabulations of the Survey of Employers in the Low-Skill Labor Market.

factors are less important.<sup>28</sup> In contrast, this is not the case for jobs for which prior training is very important. Consistent with our findings from the wage regressions, recently filled noncollege jobs that require daily writing and computer use are more likely to be high wage/benefit jobs than jobs that do not. Jobs that require daily reading are less likely to be high wage/benefit jobs than those that do not (a difference of over 20 percentage points), which might be reflecting the relatively abundant supply of this skill. No other job requirements are significantly correlated with high wage/benefit jobs.

Worker characteristics also affect the chances that a recently filled noncollege job is high wage/benefit. The probability that a man is in a high wage/benefit job is 33 percentage points higher than a woman's probability, even when taking job requirements, employer characteristics, and other factors into account. There are, however, no significant differences by race, ethnicity, or immigration status. Older workers are more likely than younger workers to hold recently filled noncollege jobs that are high wage/benefit jobs, likely a return for experience in the labor market. In addition, those with some education beyond high school are more likely to be in high wage/benefit jobs than those without a high school education, but there is little difference in probability between those with a high school degree, some college, and a college degree.

Certain types of employers are more likely to have high wage/benefit noncollege jobs. For example, jobs with large and nonrural employers are 30 and 23 percentage points more likely to be high wage/benefit jobs, respectively, than jobs with small and rural employers. Echoing our findings from the wage regressions, jobs in retail trade are about 33 percentage points less likely to be high wage/benefit than jobs in manufacturing.

---

<sup>28</sup> Logit coefficients presented in Exhibit VII.2 are transformed into percentage point effects using the following standard formula:  $P*(1-P)*\beta$  where  $P$  is the probability at the mean and  $\beta$  is the estimated logit coefficient on the variable of interest.

In contrast to our wage results, however, recently filled noncollege jobs in construction are less likely to be high wage/benefit jobs than jobs in manufacturing even though construction jobs carry a substantial wage premium. This suggests that although the construction industry jobs offer relatively high pay for less-skilled workers, these jobs do not offer health benefits and paid leave.

Among job characteristics, the most important factor influencing whether or not a recently filled noncollege job is high wage/benefit is whether the job is full-time or not: part-time jobs are 56 percentage points less likely to be high wage/benefit than jobs requiring 35 hours or more a week. There are no statistically significant differences between jobs with employers that offer training and flexible scheduling and those that do not.

Finally, the way the most recently hired worker in a noncollege job was identified is correlated with the chance that such a position is high wage/benefit. Workers who were hired through referrals are less likely to be in high wage/benefit jobs than those hired through an application or walk-in. It may be that in the noncollege job market, those workers who cannot obtain a good job by just applying are the ones who seek out referrals to help them find work. However, it is also possible that different types of referrals that we cannot distinguish here may have different results.

Higher-skill jobs. Another metric for success in the labor market is obtaining a job with relatively high skill requirements. As we have seen, even within noncollege labor markets there are jobs that demand more specific skills and experience. We define a higher-skill job as a job for which at least one of our three main requirements (having a high school degree, past experience, and specific skills training) is very important (all



non-entry-level jobs). Under this definition, 68 percent of recently filled noncollege jobs are higher-skill jobs.

For our analysis of the factors associated with obtaining/filling a higher-skill job, we estimate a logit model using the same covariates as we do in the wage and high-wage/benefit job models except we omit job requirements because they compose the dependent variable. Our results appear in Exhibit VII.2.<sup>29</sup>

Among the job requirements that are associated with higher-skill jobs, daily reading, writing, and computer use are all associated with an increased probability of the job having higher-skill requirements. The effects range from 12 to 18 percentage points. Certain tasks are associated with a lower probability that a recently filled noncollege job is a higher-skill job, including jobs that require daily group work and those requiring daily arithmetic which are 12 to 16 percentage points less likely to be higher-skill jobs.

Personal characteristics also are associated with holding higher-skill jobs. Blacks and workers under the age of 25 recently hired into noncollege jobs are less likely to be in higher-skill jobs compared with their white and older counterparts. We find no difference in the probability of holding these jobs by gender. Not surprisingly, those with a high school education or beyond as well as those with past specific skill training are more likely to be in higher-skill jobs than those without college degrees and with no training.

Few employer-level characteristics influence the probability that a job is higher-skilled. Jobs in small firms are about 10 percentage points less likely to be higher-

---

<sup>29</sup> Again, the regression is estimated on all observations with valid data on the dependent variable. Flag variables are included in the regression to account for cases in which values for the explanatory variables are missing. In some cases, the flag variables are perfectly correlated with the outcome; in these cases, the observations are dropped from the regression.

skilled. Also, somewhat surprisingly, recently filled noncollege jobs in the financial insurance and real estate industry are less likely to be higher-skilled than those in manufacturing. Perhaps this is because most jobs in finance require a college degree and the noncollege jobs in the industry may have minimal skill requirements.

As is the case for wages and high wage/benefit jobs, the only job characteristic that is significantly associated with higher-skill jobs is full-time/part-time status: recently filled noncollege jobs that involve less than 35 hours a week of work are 24 percentage points less likely to be higher-skill jobs than full-time jobs. Finally, certain methods for identifying workers are associated with higher-skill jobs. Positions that were filled through the use of public or private employment agencies and those found through advertisements are 23 and 17 percentage points more likely to be higher-skill jobs than those filled through an application or walk-in.

These results suggest that literacy and computer skills as well as higher levels of education may be important gateways to relatively higher-skill jobs among the constellation of noncollege jobs. However it is important to note that even after controlling for worker, firm, and job characteristics blacks are less likely to be in higher-skill jobs than whites. Finally, employment agencies appear to be useful in helping less-skilled workers secure relatively higher-skill jobs.

Promotion opportunities. Above, we examined the factors that distinguish entry-level from next-level noncollege jobs. For those workers whose qualifications limit them mainly to entry-level jobs, it is also important to distinguish between jobs that have room for advancement and those that are “dead end” jobs. Here we focus on the 32 percent of recently filled noncollege jobs for which none of our three key requirements (a high

school degree, past experience, specific skills training) is very important (our definition of entry-level jobs from Section VI), and we ask which of these entry level jobs offer an excellent chance of promotion. We find that 36 percent of entry-level jobs offer good promotion prospects.<sup>30</sup> Interestingly, within entry-level jobs those with excellent promotion possibilities do not offer significantly higher wages, but the promise of promotion suggests an avenue for advancement with the employer, potentially making these jobs more desirable.

We examine the factors associated with good promotion prospects using a logit regression model. The factors are largely the same as those used to assess the probability that a noncollege job is a relatively higher-skill job, but we exclude variables on job requirements.<sup>31</sup> Our findings appear in the last column of Exhibit VII.2.

By and large, none of the worker characteristics we consider differentiate between noncollege entry-level jobs that have good and not so good promotion prospects. The only characteristic significantly associated with good prospects is age: workers in entry level noncollege jobs that are under age 25 are 36 percentage points more likely to have excellent promotion opportunities than their counterparts over age 44. It is likely that most older workers in noncollege jobs are already in next-level as opposed to entry-level jobs. Those that remain in entry-level jobs at older ages may have some factor that is unmeasured here (such as a personal limitation or a long period out of the labor market) that limits their prospect of landing jobs with better prospects for advancement.

---

<sup>30</sup> We limit this analysis to entry-level jobs because higher-requirement jobs with low chances for promotion may already be a few rungs up the career ladder and thus cannot be profitably compared with entry-level jobs with low promotion possibilities.

<sup>31</sup> Once again, all regressions are estimated using weighted data, standard errors are adjusted for sample clustering, and missing values for explanatory variables are set to 0 and a missing data indicator variable is set to 1.

Although neither employer size nor location is significantly associated with an excellent chance of promotion, other employer characteristics are. For example, entry-level noncollege jobs with nonprofits are less likely to have good promotion prospects than jobs at for-profit firms. Further, entry-level noncollege jobs in agriculture, construction, retail, finance, health, and other services all are more likely to offer promotion opportunities than jobs in manufacturing. Again, this may be due to the fact that most recently filled noncollege jobs in manufacturing are already next-level as opposed to entry-level jobs.

Among job characteristics, the only feature that is associated with promotion opportunities for recently filled entry-level noncollege jobs is whether or not an employer offers formal training. Jobs in firms that offer training are about 15 percentage points more likely to have excellent promotion prospects than jobs that do not. Interestingly, full-time work is not associated with greater promotion opportunities. Also, there are no significant differences in the chance for promotion based on how a worker was identified. For workers seeking entry-level noncollege jobs, their best opportunities for advancement come at companies that offer some training, even though training is not associated with higher wages or benefits directly.

These results should not be interpreted as promoting the desirability of entry-level jobs with promotion possibilities over next-level jobs. Our earlier results show that, by definition, next-level jobs offer higher wages and benefits on average. However, these promotion results do suggest that for workers entering the labor market with limited ability to land next-level jobs, there are some ways to target entry-level jobs with better promotion possibilities.

## **VIII. Conclusions and Implications**

The underlying goal of this study of employers in the low-wage labor market is to understand the needs of employers trying to fill noncollege positions in order to help potential workers obtain the skills required to meet employers' needs and identify ways to improve the match between employers and job-seekers. To this end, in 2007, we conducted a survey of employers who have recently filled jobs that do not require a college education which elicited information on employer characteristics, job requirements, wages and benefits, hiring practices, and potential for advancement.

The findings from this national survey of employers in the noncollege labor market provide useful guidance to policy makers seeking to help less-skilled workers obtain and keep jobs and to help employers find the productive workers they need. We summarize our findings here and then go on to describe what policy can do in light of these findings.

### **What Employers Want**

Our findings suggest that while some may characterize noncollege jobs as "less-skilled," many of these jobs do require specific skills and experience. When seeking to fill a position that does not require a college degree, employers value what have come to be called "soft skills." The most important factors in hiring reported by employers for more than three-quarters of all recently hired less-skilled workers are having a positive attitude, desire to work hard, and performing well in the job interview. These findings on soft skills are consistent with earlier research (e.g., Holzer 1996; Maxwell 2007). In

addition, a factor that is very important to almost half of these hires is their willingness to work odd or flexible hours.

Some other factors that might be termed “hard skills” are also important for many of these hires, but to a lesser extent than the soft skills mentioned above. These include work experience and English fluency. Skills training and school performance were much less important factors. Nevertheless, many jobs do require prior experience and/or skills training. Having a high school degree or GED is extremely important or required for over half of all recently filled noncollege jobs. Having prior job-related experience is extremely important for about two out of five of these jobs, and having specific skills training or certification is extremely important for over a quarter of them. For almost one-fifth of these jobs, all three requirements are required or extremely important. Conversely, for only eight percent of all noncollege jobs are high school education, prior related experience, and skills training all not very important.

Another way to consider employers’ needs in this segment of the labor market is to examine the tasks recently hired workers are asked to perform. A majority of noncollege jobs require cognitive tasks be performed daily, including reading and writing. Almost three-fifths of these jobs require daily use of computers.

### **How Employers Fill Noncollege Jobs**

Employers’ reports show that only one-fifth of noncollege jobs are easy to fill while another fifth are very difficult to fill. In fact, for more than one-quarter of noncollege jobs, employers report they recently hired someone without the required

qualifications because they really needed an employee. Noncollege jobs in large firms, higher-wage industries and rural areas are more difficult to fill.

Although many noncollege jobs are filled through low-cost methods such as referrals or walk-ins, advertising is still the most common way these jobs were filled (about half of them) and a third of the advertising is on the internet.

Only about one-tenth of noncollege jobs were filled using public or private agencies. However, almost 20 percent of noncollege job employers report they had been contacted in the past year by a public or private agency trying to place welfare recipients. Employers report the quality of the candidates sent from these agencies was similar to the other candidates for these jobs. However, the percentage of jobs filled by intermediaries (including welfare and nonwelfare candidates) is far less than the percentage of employers reporting contacts, suggesting these contacts are often unsuccessful.

Employers with noncollege jobs almost universally report they are willing to hire current or former welfare recipients; far fewer are willing to hire an ex-offender. Only three percent of women recently hired into noncollege jobs were identified as current or former welfare recipients, although employers did not know the worker's welfare status for 41 percent of female workers. For about one-fifth of noncollege jobs, employers said they would be willing to hire an ex-offender regardless of the specific crime. For another 35 percent, employers report willingness to hire, depending on the crime. In addition, for almost half of noncollege jobs, employers conduct criminal background checks and for about 40 percent they conduct drug tests.

## **Entry-Level Jobs Compared with Other Noncollege Jobs**

The fact that many noncollege jobs have significant requirements suggests that many workers with minimal experience and skills may have limited access to these jobs. Using our findings on job requirements we separate out a group of “entry-level” jobs that require limited experience, education, and skill from “next-level” jobs that require more from workers. We find that about a third of noncollege jobs are entry-level jobs in which high school education, prior related experience, and skills training are all rated as being somewhat or not very important. This does not mean entry-level workers cannot be hired into any of the other two-thirds of jobs. Employers do report instances of workers in jobs for which they do not have the required education or skills training. However, access to these “higher requirement” jobs may be more difficult.

The identified entry-level jobs offer significantly lower wages and fewer benefits than next-level jobs that require more experience and skill. Entry-level jobs pay on average \$9.25 an hour. Only 45 percent of workers in these jobs have health insurance coverage, 42 percent pension coverage, and 55 percent paid leave. Workers in these jobs are far more likely to be working a rotating shift or part-time hours. These jobs are more often found in small firms, rural areas, and in lower-wage industries (although the difference for this last is not statistically significant). In addition, entry-level jobs are filled using different methods than higher-skilled jobs. They are less likely to be filled by advertising and more likely to use walk-ins or referrals.



## **Factors Associated with “Better” Noncollege Jobs**

We define “better” jobs in multiple ways to examine the factors that lead to landing jobs that pay higher wages, provide more in the way of benefits, and offer the chance for promotion and advancement. First, we consider wages. The median wage paid to recently hired noncollege workers is \$11, but 25 percent of these workers earn \$8.50 or less an hour. The highest paid quarter of these workers earn \$14.50 or more an hour. On average, the hourly wage is \$12.30. In addition, about half of these jobs usually involve overtime, tips, bonuses or commissions (although we don’t know how much this adds to the hourly wage). Variation across firm size, industry, and location follow the expected patterns with large, higher-wage industry, nonrural employers paying more than small, lower-wage industry, rural employers.

Jobs for which past job-specific experience or specific skills training is extremely important or required pay substantially better than other jobs, after taking into account worker characteristics, specific job tasks, and employer characteristics. The specific work tasks that are associated with higher wages are writing, using a computer, and monitoring instruments. Worker characteristics associated with higher wages include having a college degree, being white and being male. Employer characteristics associated with higher wages include large firm size, nonrural location, for-profit status, and high union concentration. The only job characteristic associated with higher wages is full-time status. Finally, how an employer identified the most recently hired worker to fill a noncollege job is not significantly correlated with wages.

## **Benefits and Employer Practices**

Many noncollege jobs are in firms that provide benefits such as health insurance, pensions and paid leave, but not all the workers in these jobs are eligible for these benefits. For example, although 88 percent of these jobs are in firms that offer health benefits to some employees, only 69 percent of workers in these jobs actually qualify for health benefits. Most of the rest could become eligible as their tenure on the job increases or if their work hours increased. The pattern of coverage for pensions and paid time off is similar.

Not all workers with paid leave can use this benefit to care for a sick child or family member, although almost all workers can take unpaid leave for this reason. Although 71 percent of workers in noncollege jobs have paid leave for themselves, only 53 percent can take paid leave to care for a sick child or family member. However, 97 percent of noncollege workers can take unpaid time off to provide this care.

Most noncollege jobs have regular day or evening shift work, but 15 percent require night shift or rotating shift work. On average, night shift and rotating shift work jobs pay less and have fewer benefits. The vast majority of workers in noncollege jobs work full-time and earn significantly higher wages than part-time workers.

Although almost all noncollege jobs provide some form of informal or general workplace training, a substantial proportion of noncollege jobs offer specific training. Over half provide formal training from an instructor with a set curriculum on-site and another 20 percent provide off-site training. Almost one-tenth provide skill training. Over half of noncollege jobs provide a mentor or “job buddy.” Surprisingly, formal training is much more common in lower-wage industries than in higher-wage industries.

However, jobs with formal training are not associated with higher wages or benefits, after controlling for other factors.

### **Worker Performance and Promotion Possibilities**

The incidence of problems with employee performance for recently hired workers is low. Only 15 percent have had any of the following problems on the job: tardiness; poor attitude toward work; lack of basic math, verbal, reading skills or other job-related skills; substance abuse issues; or difficulties interacting with coworkers, supervisors, or customers and clients. The most prevalent problem employers report is tardiness, occurring for nine percent of these workers. These results must be viewed in the context that most of these workers have fairly short tenures: three-fifths have been on the job for less than six months.

The majority of noncollege jobs offer an excellent or good chance of promotion, according to employers. Almost 70 percent of recently filled noncollege jobs offer a good to excellent chance at being promoted for workers that perform well on the job, and 46 percent of these promotions would typically come within a year. Another 19 percent of jobs rarely or never offer promotions. Promotion possibilities are higher in large firms. Over a quarter of jobs in smaller firms rarely or never offer promotions.

Not only do employers report high promotion possibilities, many workers on the job for at least six months have been promoted. Among workers that have been with the employer for at least six months, 55 percent have already been promoted and 64 percent have received raises. In addition, among these longer-tenure workers, over 30 percent are in jobs from which employers say they rarely or never promote. This means that among these workers, a large proportion of those in jobs with promotion possibilities have been

promoted. The raises received by these workers are nontrivial. Of all who received a raise, the median wage increase was \$1 over the median starting wage of \$9.50 for this group.

### **What Policy Can Do**

These findings are relevant for policy, and we discuss here ways that information on the demand side, including employer characteristics and job requirements, can be used to target assistance to workers in the low-skilled labor markets.

The first major point is that job requirements and employer characteristics are associated with wages and benefits even after controlling for worker characteristics, education, and skill training. This means that intermediaries and programs assisting disadvantaged workers can and should target specific job skills and employers to help workers find better jobs.

These findings show that even within the less-skilled labor market, there is a significant range of skill requirements, with some jobs having only minimal requirements and others demanding job-related experience or training and daily performance of cognitive skill tasks. It is clear that employers are looking for literate workers who can fill positions in which they are frequently called upon to read and write and to use a computer. Not only are these skills sought after by employers, but they are also associated with higher wages for workers. These specific skills can be emphasized in high school and GED curricula as well as in employment and training programs targeted at vulnerable populations such as high school dropouts, welfare recipients, and ex-offenders.

The substantial difference in the wages and benefits of entry-level versus next-level jobs suggests an important role for helping workers with minimal requirements move into these next-level jobs. These findings are positive, in that even without gaining a college degree there is room for substantial wage and benefit gains within the noncollege labor market. Employment support programs can work with adults already in entry-level jobs to help them improve their skills to move into next-level jobs.

In addition, our findings show that jobs in larger firms and jobs in certain industries tend to offer higher wages and better benefits even after controlling for the requirements of the jobs. This suggests that sectoral employment approaches that focus on particular industries are warranted and that public and private sector employment service providers can target particular employment sectors (like construction) to help less-skilled workers secure relatively higher-paying jobs. Also, across all types of jobs, industries, and workers, noncollege jobs in firms that have high unionization rates pay significantly more than similar jobs in non-unionized firms, suggesting that helping less-skilled workers access union jobs may be important.

We also find that employers recruit differently for entry-level and next-level jobs, suggesting targeted roles for intermediaries in job search activities. Focusing on the jobs with the lowest skill requirements, entry-level noncollege jobs, the most important path to hiring is a personal referral—the worker is recommended to the employer by a friend, relative, professional acquaintance, or another worker. Referrals as a means of identifying workers are also more common among small and rural employers. This corroborates past evidence that building networks for entry-level workers is important. This can be accomplished by intermediaries substituting for personal networks and

providing referrals to employers as well as by providing networking opportunities for workers with limited skills either with small business owners or other workers who have had success in this segment of the labor market.

The most common method of filling “next-level” positions which have higher job requirements is through the use of advertisements. As such, basic job search help may be important to job-seekers who have the skills to fill these “next-level” jobs. Thus, a potentially cost-effective way for employment and training programs to help relatively higher-skilled job seekers in the noncollege market find work could be to provide access to job postings, particularly internet postings.

Finally, we find that noncollege jobs that have been recently filled by women and blacks pay less than those filled by whites and men even when taking into account job requirements, employer characteristics, and the workers’ own skills, education, and experience. This finding strongly suggests that labor market discrimination is still an important issue for less-skilled female and minority workers.

This report presents the initial findings from this new employer survey data. Additional deeper analysis is possible in each of the areas we address. The findings reported here and future research using these data will continue to add to our knowledge on employment in the less-skilled labor market.

## References

- Acs, Gregory and Pamela Loprest. 2004. *Leaving Welfare: Employment and Well-Being of Families that Left Welfare in the Post-Entitlement Era*, Upjohn Institute.
- Acs, Gregory and Pamela Loprest. 2001. "Final Synthesis Report of the Findings from ASPE's Leavers Grants," report to the USDHHS, Office of the Assistant Secretary for Planning and Evaluation.
- Acs, Gregory and Austin Nichols. 2007. "Low-Income Workers and Their Employers: Characteristics and Challenges," Washington, DC: The Urban Institute.
- Acs, Gregory, Katherin Ross Phillips and Daniel McKenzie. 2001. "Playing by the Rules but Losing the Game: Americans in Low-Income Working Families," (with). In *Low Wage Workers in the New Economy*. Edited by Richard Kazis and Marc Miller. Washington, DC: The Urban Institute.
- American Association for Public Opinion Research. 2006. *Standard Definitions: Final Dispositions of Case Codes and Outcome Rates for Surveys*. American Association for Public Opinion Research: Washington, DC.
- Blank, Rebecca. 2002. "Evaluating Welfare Reform in the United States." *Journal of Economic Literature*. vol 40 (4):1105-1166.
- Bureau of Labor Statistics. 2008. Website. <http://www.bls.gov/cps/home.htm> (last accessed 2/29/08).
- Andersson, Fredrik, Harry Holzer, Julia Lane. 2005. *Moving Up or Moving On: Who Advances in the Low-Wage Labor Market?* New York: Russell Sage Foundation.
- Bloom, Dan, Richard Hendra, Karin Martinson, Susan Scrivener. 2005. "The Employment Retention and Advancement Project: Early Results of Four Sites." MDRC, New York, NY.
- Giloth, Robert, ed. 2004. *Workforce Intermediaries for the Twenty-First Century*. Philadelphia, PA: Temple University Press.
- Gladden, Tricia, and Chris Taber. 2000. "Wage Progression among Less-Skilled Workers." In *Finding Jobs: Work and Welfare Reform* (David Card and Rebecca Blank, eds) pp.160–92. New York: Russell Sage Foundation.
- Holzer, Harry. 1996. *What Employers Want: Job Prospects for Less-Educated Workers*. New York: Russell Sage Foundation.
- Holzer, Harry and Karin Martinson. 2005. "Can We Improve Job Retention and Advancement among Low-Income Working Parents?" Urban Institute Report: Washington, DC.

Holzer, Harry and Michael Stoll. 2001. *Employers and Welfare Recipients: The Effects of Welfare Reform in the Workplace*. Public Policy Institute of California.

Loprest, Pamela and Sheila Zedlewski. 2006. *The Changing Role of Welfare in the Lives of Low-Income Families with Children*. Assessing the New Federalism, Occasional Paper Number 73. Washington, DC: The Urban Institute.

Ensor, Todd, Frank Potter, Shinu Verghese. 2008. "Understanding the Demand Side of the TANF Labor Market: National Survey of Business Establishments." Mathematica Policy Research: Princeton, NJ.

Maxwell, Nan L. 2006. *The Working Life: The Labor Market for Workers in Low-Skilled Jobs*. Kalamazoo, MI: W.E. Upjohn Institute for Employment Research.

Osterman, Paul. 2007. "Employment and Training Policies: New Directions for Less-Skilled Adults". In *Reshaping the American Workforce in a Changing Economy* (Harry Holzer and Demetra Smith Nightingale, eds.) pp 119-154. Washington, DC: The Urban Institute Press.

Rangarajan, Anu and Tim Novak. 1999. "The Struggle to Sustain Employment: The Effect of the Post-Employment Services Demonstration." Mathematica Policy Research.

Schochet, Peter and Anu Rangarajan. 2004. "Characteristics of Low-Wage Workers and Their Labor Market Experiences: Evidence from the Mid-to-Late 1990s." Mathematica Policy Research, Inc.

Travis, Jeremy, [Amy L. Solomon](#), and [Michelle Waul](#). 2001. "From Prison to Home- The Dimensions and Consequences of Prisoner Re-entry." Urban Institute: Washington, DC.



## Appendix A

### Survey Methods<sup>32</sup>

The goal of this survey of employers was to gain a better understanding of the demand side (employer side) of the labor market for less-skilled workers by collecting data on a national sample of employers who had recently filled a position that did not require a college degree. As such, the data collected can be used to assess the type of jobs available to less-skilled workers, the types of workers that fill these jobs, and how workers hired into these positions can expect to be treated in terms of pay, benefits, training, and advancement. Below we discuss our sample frame, the survey process, patterns of response, and the construction of analytic weights to be used in data analysis. Survey content and findings are addressed in the body of this report, and the survey instrument appears in Appendix B. For more technical documentation, see, “National Survey of Business Establishments” (Ensor et al. 2008).

### Sampling Approach

To characterize the labor market for less-skilled workers, we sampled private sector establishments with four or more workers. We restricted the sample to private sector employers because we are primarily interested in learning about the non-government opportunities available to less-skilled workers, the expectations of these employers, and the factors that make for a successful hire/job placement. We restrict the sample to establishments with four or more workers for practical reasons. Even though the majority of establishments have few workers, most workers are employed in larger establishments. Indeed, County Business Patterns data from 2003 show that almost half of all establishments in the US have four or fewer workers, but tabulations from the Current Population Survey suggest that only 8 percent of all workers earning less than \$10 an hour work in firms with four or more workers. By eliminating the smallest firms from our sample we are able to focus our survey resources and capture most of the jobs in the low-wage labor market.

For the sampling frame, the most comprehensive commercially available listing of businesses is the Marketing File from Dun & Bradstreet, Inc. (D&B).<sup>33</sup> D&B estimates that there are nearly 3 million establishments in the United States with five or more employees.<sup>34</sup> Instead of purchasing the database directly from D&B and selecting our own sample, we chose to obtain the data from the Marketing Systems Group, Inc.

---

<sup>32</sup> Portions of this Appendix are drawn directly from a separate technical document about this survey, “National Survey of Business Establishments” (Ensor et al. 2008).

<sup>33</sup> Lists of businesses are also available from vendors that use the telephone directory to identify establishments. These are less complete and less current than the D&B database. These databases usually lack the linkage among establishments useful for identifying corporate structure and differentiating between establishments and enterprises.

<sup>34</sup> This count includes establishments that have refused to provide D&B with the count of employees; most of these establishments are expected to have five or more employees.

(MSG), a vendor who had already purchased access to the full D&B database and could provide reliable samples at a reasonable cost.<sup>35</sup>

For sample stratification, we used some factors as explicit stratification factors and others as implicit stratification factors for the sample design.<sup>36</sup> The three explicit stratification factors that we used are:

1. Urban and rural status of the county (based on a 2003 Urban Influence Code)
2. Industry (based on Standard Industrial Classification [SIC] codes)
3. Size of enterprise that controls the establishment (fewer than 100 employees versus 100 or more employees)

For the urban and rural status, we used the Urban Influence Code that had been developed by the Economic Research Service of the U.S. Department of Agriculture (see [<http://www.ers.usda.gov/Briefing/Rurality/urbaninf>]). The industry strata (target or nontarget industries) were based on the retail trade and food service industries (the target industries) versus all others as these industries represent a disproportionate share of low wage jobs.<sup>37</sup> In addition to these explicit sampling strata, we asked the vendor to impose implicit stratification (within the explicit strata) based on the state and geographic region and the number of employees at the establishments.

## Survey Process

After the sample was selected, sampled employers were sent an advance letter (see Appendix C) on U.S. Department of Health and Human Services letterhead describing the survey and asking them to participate. Approximately one week after the letters were sent, the employers were contacted by telephone interviewers from Mathematica Policy Research (MPR). The surveyor asked to speak with the staff member most knowledgeable about hiring for positions that did not require a college degree. Employers were asked if they had filled a noncollege position within the past two years; those that did not were screened out of the survey while those that had were asked to participate in a telephone interview lasting about 20 minutes. The survey was administered using Computer Assisted Telephone Interview (CATI) instrument.

---

<sup>35</sup> MSG was willing to impose specific modifications to its usual sampling procedures to improve the quality of the sample and to work with us to provide additional counts needed to compute the sampling weights.

<sup>36</sup> Explicit stratification is based on fixed sampling strata and fixed sample allocation to these strata. Implicit stratification is an approximate proportional sample allocation across the implicit stratification factors that are imposed by sorting the sampling frame and using a sequential selection procedure. Implicit stratification is used to improve the representation of subgroups of the sampling frame in the sample.

<sup>37</sup> Tabulations for the Current Population Survey (CPS) indicate that these industries disproportionately employ low-wage workers (workers who earn less than \$10 per hour). For example, while 12.1 percent of all workers are in “retail trade,” 20.6 percent of low-wage workers are employed in that industry; similarly, while 5.6 percent of all workers are in “food services and drinking places,” 14.6 percent of all low-wage workers are employed in that industry.

Employers that asked to respond to a written version of the questionnaire were given that option.

MPR continued to call each sampled employer until the employer was screened out of the sample, they responded to the survey, or they had been contacted at least 10 times without completing the interview or eligibility screener. One third of the non-responding employers were designated for intensified efforts at refusal conversion which included follow-up letters and phone calls.

### **Survey Response Rates and Representativeness**

2,960 employers were selected for the sample. 1,060 employers provided completed interviews, 539 were determined to be ineligible, 360 refused to participate, and 1,001 never completed the screening questions to determine eligibility. Based on American Association for Public Opinion Research (AAPOR 2006) guidelines, we compute our overall response rate as follows:<sup>38</sup>

$$R = \text{completed interviews} / (\text{determined eligibles} + \text{undetermined} * \text{eligibility rate})$$

where the eligibility rate is the proportion of completed interviews to completed interviews plus determined ineligibles. Thus we find:

$$R = 1060 / (1060 + (1361 * (1060/1599))) = 1060 / (1060 + (1361 * 0.66)) =$$

$$1060 / 1958 = 54\%$$

This response rate falls below our target response rate of 70%, but there is no way to guarantee that respondents are representative of the sample as a whole even with a moderately high response rate. Because we drew a stratified sample, however, we can compare respondents and non-respondents based on their size, location, and industry grouping. As table A.1 shows, response rate within strata defined by size (small 5-99 workers and large (100+ workers), location (rural and nonrural), and industry (higher wage industries v. lower wage industries) are fairly similar, although there is a slight skewing toward rural employers. This suggests that along at least these three dimensions, our respondents are broadly representative of the sample universe. To ensure the data can be used to reflect the low-wage labor market, sampling weights can be adjusted for non-response and analytic weights can be constructed (discussed below).

### **Description of Weighting Procedures**

The initial sampling weight was computed as the inverse of probability of selection within each of the eight sampling strata. The initial sampling weight is computed as:

---

<sup>38</sup> This is analogous to AAPOR's response rate 3. Alternative response rate calculations are shown in Ensor et al. (2008).

$$w_{ij} = N_j / n_j$$

where  $w_{ij}$  = sampling weight of unit 'i' in stratum 'j'

$N_j$  = sampling frame count for stratum 'j'

$n_j$  = sample count for stratum 'j'.

After this initial weight was computed, we accounted for the subsample used among recalcitrant sample members. As described previously, we implemented a subsampling process among recalcitrant sample members to more effectively and efficiently direct data collection resources. We identified 456 establishments that were located and had more than 10 attempts to contact for data collection. We then randomly selected 150 of these recalcitrant businesses for more intensive data collection. The initial sampling weight was adjusted for this subsampling: the initial weight for the establishments in the subsample was multiplied by three, and the weight for the establishments not in the subsample was set to zero. This revised sampling weight was poststratified to the population count from the D&B data base in each stratum before the nonresponse adjustment.

To compensate for nonresponse, we implemented the commonly used weighting class method. Each sample member was classified based on response and eligibility. A sample member was classified as a respondent if that sample member completed the interview (that is, an eligible respondent) or was determined to be ineligible (that is, an ineligible respondent). Ineligible respondents included cases that were out of business, government cases, and cases that did not meet the survey eligibility criteria. To form the weighting class, differences in response rates were analyzed across multiple potential characteristic variables available in the D&B database. These variables included geographic region (using census region), Urban Influence Code, number of employees at the establishment, whether the establishment was part of a single- or multiple-location firm, census division, and primary SIC codes. Cross-tabulations were generated over all strata and within each stratum. The four rural strata (Urban Influence Codes 3 to 12) were combined because of the small sample size in these strata. Based on this analysis, the sample was partitioned into 46 mutually exclusive weighting cells (see Section G for more detailed analysis of response). The weighting cells for each of the strata are:

- **Stratum 1:** The cross-classification of Urban Influence Code (two levels) and census region (four levels)
- **Stratum 2:**
  - Large metropolitan counties with 1 million or more residents and the number of employees at the establishment (three levels)
  - Small metropolitan counties with less than 1 million residents and the census region (four levels)
- **Strata 3 and 4:** The cross-classification of single- or multiple-location firm (two levels) and the census region (four levels).

- **Stratum 5:** For multiple-location firms, the size of establishment. For single-location firms with less than 40 employees and single-location establishments with more than 200 employees, the Urban Influence Code. For other single-location firms, the establishment size.

The sampling weight of the respondents was then adjusted within each weighting class by multiplying the sampling weight by the adjustment factor, which is the ratio of the sum of sampling weights for the full sample and the sum of sampling weights for the respondents. The adjusted weight is:

$$\begin{aligned} \text{Adj}(w_i) &= w_i \times \text{AdjFac.}, \text{ if 'i' is a respondent.} \\ &= 0, \text{ if 'i' is a non-respondent.} \end{aligned}$$

where,

$$\text{AdjFac} = \frac{\sum_{i \in R} w_i + \sum_{i \in NR} w_i}{\sum_{i \in R} w_i}$$

and  $w_i$  is the sampling weight for unit  $i$ ,  $R$  is the respondent group, and  $NR$  represents the nonrespondents. This adjustment was done within each weighting cell.

This adjustment distributes the weight of the nonresponding units to the responding units in each weighting class so that the sum of adjusted weight for responding cases equals the sum of sampling weight for the total sample in each weighting class.

The nonresponse adjusted weight was poststratified so that the sums of the nonresponse adjusted weights equal the known population count for each of the eight sampling strata. The population counts are the number of establishments in each of the sampling strata at the time of sample selection. The final weight is calculated as:

$$\text{FNL\_WT} = \text{Adj}(w_i) \times \left( \frac{\text{Population total for each stratum}}{\text{Sum of adj. weight in each stratum}} \right).$$

FNL\_WT can be used to obtain tabulations that are representative of employers in the low-wage labor market. To obtain tabulations that are representative of job opportunities in the low-wage labor market, we construct an analytic weight (AWT) by multiplying the employer weight (FNL\_WT) by the number of employees at the sampled firm (firm size).